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分 冊

Separate Volume

出願番号 特願2003-102206  
[ST.10/C] : [JP2003-102206]

分冊番号 8 / 9

CERTIFIED COPY OF  
PRIORITY DOCUMENT

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Ala Cys Ser Thr Ser Ser Ala Ala Ile Met Ala Thr Ala Thr Ser Arg  
290 295 300

Asn Cys Asp Lys Leu Lys Ser Phe His Leu Ser Pro Arg Gly Pro Pro  
305 310 315 320

Thr Ser Glu Pro Pro Pro Val Pro Ala Asn Lys Pro Lys Phe Leu Lys  
325 330 335

Ile Ala Glu Glu Asp Pro Pro Arg Glu Ala Ala Met Pro Gly Leu Phe  
340 345 350

Val Pro Pro Val Ala Pro Arg Pro Pro Ala Leu Lys Leu Pro Val Pro  
355 360 365

Glu Ala Met Ala Arg Pro Ala Val Leu Pro Arg Pro Glu Lys Pro Gln  
370 375 380

Leu Pro His Leu Gln Arg Ser Pro Pro Asp Gly Gln Ser Phe Arg Ser  
385 390 395 400

Phe Ser Phe Glu Lys Pro Arg Gln Pro Ser Gln Ala Asp Thr Gly Gly  
405 410 415

Asp Asp Ser Asp Glu Asp Tyr Glu Lys Val Pro Leu Pro Asn Ser Val  
420 425 430

Phe Val Asn Thr Thr Glu Ser Cys Glu Val Glu Arg Leu Phe Lys Ala  
435 440 445

Thr Ser Pro Arg Gly Glu Pro Gln Asp Gly Leu Tyr Cys Ile Arg Asn  
450 455 460

Ser Ser Thr Lys Ser Gly Lys Val Leu Val Val Trp Asp Glu Thr Ser  
465 470 475 480

Asn Lys Val Arg Asn Tyr Arg Ile Phe Glu Lys Asp Ser Lys Phe Tyr  
485 490 495

Leu Glu Gly Glu Val Leu Phe Val Ser Val Gly Ser Met Val Glu His  
500 505 510

Tyr His Thr His Val Leu Pro Ser His Gln Ser Leu Leu Leu Arg His

出証特 2 0 0 4 - 3 0 5 9 6 6 0



Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr  
145 150 155 160  
Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro  
165 170 175  
Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val  
180 185 190  
His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
195 200 205  
Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile  
210 215 220  
Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val  
225 230 235 240  
Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala  
245 250 255  
Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro  
260 265 270  
Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val  
275 280 285  
Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val  
290 295 300  
Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln  
305 310 315 320  
Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln  
325 330 335  
Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala  
340 345 350  
Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro  
355 360 365  
Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr

370                      375                      380  
 Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser  
 385                      390                      395                      400  
 Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr  
                     405                      410                      415  
 Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr  
                     420                      425                      430  
 Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe  
                     435                      440                      445  
 Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys  
                     450                      455                      460  
 Ser Leu Ser Leu Ser Pro Gly Lys  
 465                      470

<210> 3539

<211> 447

<212> PRT

<213> Homo sapiens

<400> 3539

Met Glu Phe Gly Leu Thr Trp Val Phe Leu Val Ala Leu Leu Arg Gly  
     1                      5                      10                      15  
 Val Gln Cys Gln Val His Leu Val Glu Ser Gly Gly Gly Val Gly Gln  
                     20                      25                      30  
 Pro Gly Lys Ser Leu Lys Leu Ser Cys Gln Ala Phe His Leu Asp Phe  
                     35                      40                      45  
 Lys His Leu Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu  
                     50                      55                      60

Glu Trp Leu Ala Val Ile Trp Tyr Asp Gly Ser Asn Ile Phe Tyr Ala  
65 70 75 80  
Asp Ser Ile Lys Asp Arg Phe Ile Ile Ser Arg Asp Asn Gly Asn Arg  
85 90 95  
Thr Leu Tyr Leu Gln Met Asp Asn Leu Arg Ala Asp Asp Thr Ala Val  
100 105 110  
Tyr Phe Cys Val Thr Gly Arg Arg Glu Ser Gly Ser Ser Leu Trp Gly  
115 120 125  
Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser  
130 135 140  
Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala  
145 150 155 160  
Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Ala Val Leu Gln Ser  
165 170 175  
Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser  
180 185 190  
Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Gly Asn  
195 200 205  
Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His  
210 215 220  
Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val  
225 230 235 240  
Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr  
245 250 255  
Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu  
260 265 270  
Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys  
275 280 285  
Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser

290	295	300	
Val Leu Thr	Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys		
305	310	315	320
Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile			
	325	330	335
Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro			
	340	345	350
Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu			
	355	360	365
Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn			
	370	375	380
Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser			
385	390	395	400
Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg			
	405	410	415
Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu			
	420	425	430
His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys			
	435	440	445

&lt;210&gt; 3540

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3540

Met Leu Thr Arg Leu Val Leu Ser Ala His Leu Ser Ser Thr Thr Ser

1

5

10

15

Pro Pro Trp Thr His Ala Ala Ile Ser Trp Glu Leu Asp Asn Val Leu  
20 25 30  
Met Pro Ser Pro Arg Ile Trp Pro Gln Val Thr Pro Thr Gly Arg Ser  
35 40 45  
Ala Ser Val Arg Ser Glu Gly Asn Thr Ser Ser Leu Trp Asn Phe Ser  
50 55 60  
Ala Gly Gln Asp Val His Ala Ile Val Thr Arg Thr Cys Glu Ser Val  
65 70 75 80  
Leu Ser Ser Ala Val Tyr Thr His Gly Cys Gly Cys Val Arg Ser Ala  
85 90 95  
Thr Asn Ile Thr Cys Gln Ser Ser Gly Gln Gln Arg Gln Ala Ala Arg  
100 105 110  
Gln Glu Glu Glu Asn Ser Ile Cys Lys Ala His Asp Ser Arg Glu Gly  
115 120 125  
Arg Leu Gly Tyr Pro Leu Ser Ala His Gln Pro Gly Ser Gly Gly Pro  
130 135 140  
Asn  
145

&lt;210&gt; 3541

&lt;211&gt; 805

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3541

Met Ala Ala Ser Gly Val Pro Arg Gly Cys Asp Ile Leu Ile Val Tyr  
1 5 10 15  
Ser Pro Asp Ala Lys Glu Trp Cys Gln Tyr Leu Gln Thr Leu Phe Leu

20	25	30
Ser Ser Arg Gln Val Arg Ser Gln Lys Ile Leu Thr His Arg Leu Gly		
35	40	45
Pro Glu Ala Ser Phe Ser Ala Glu Asp Leu Ser Leu Phe Leu Ser Thr		
50	55	60
Arg Cys Val Val Val Leu Leu Ser Ala Glu Leu Val Gln His Phe His		
65	70	75
Lys Pro Ala Leu Leu Pro Leu Leu Gln Arg Ala Phe His Pro Pro His		
85	90	95
Arg Val Val Arg Leu Leu Cys Gly Val Arg Asp Ser Glu Glu Phe Leu		
100	105	110
Asp Phe Phe Pro Asp Trp Ala His Trp Gln Glu Leu Thr Cys Asp Asp		
115	120	125
Glu Pro Glu Thr Tyr Val Ala Ala Val Lys Lys Ala Ile Ser Glu Asp		
130	135	140
Ser Gly Cys Asp Ser Val Thr Asp Thr Glu Pro Glu Asp Glu Lys Val		
145	150	155
Val Ser Tyr Ser Lys Gln Gln Asn Leu Pro Thr Val Thr Ser Pro Gly		
165	170	175
Asn Leu Met Val Val Gln Pro Asp Arg Ile Arg Cys Gly Ala Glu Thr		
180	185	190
Thr Val Tyr Val Ile Val Arg Cys Lys Leu Asp Asp Arg Val Ala Thr		
195	200	205
Glu Ala Glu Phe Ser Pro Glu Asp Ser Pro Ser Val Arg Met Glu Ala		
210	215	220
Lys Val Glu Asn Glu Tyr Thr Ile Ser Val Lys Ala Pro Asn Leu Ser		
225	230	235
Ser Gly Asn Val Ser Leu Lys Ile Tyr Ser Gly Asp Leu Val Val Cys		
245	250	255

Glu Thr Val Ile Ser Tyr Tyr Thr Asp Met Glu Glu Ile Gly Asn Leu  
260 265 270

Leu Ser Asn Ala Ala Asn Pro Val Glu Phe Met Cys Gln Ala Phe Lys  
275 280 285

Ile Val Pro Tyr Asn Thr Glu Thr Leu Asp Lys Leu Leu Thr Glu Ser  
290 295 300

Leu Lys Asn Asn Ile Pro Ala Ser Gly Leu His Leu Phe Gly Ile Asn  
305 310 315 320

Gln Leu Glu Glu Glu Asp Met Met Thr Asn Gln Arg Asp Glu Glu Leu  
325 330 335

Pro Thr Leu Leu His Phe Ala Ala Lys Tyr Gly Leu Lys Asn Leu Thr  
340 345 350

Ala Leu Leu Leu Thr Cys Pro Gly Ala Leu Gln Ala Tyr Ser Val Ala  
355 360 365

Asn Lys His Gly His Tyr Pro Asn Thr Ile Ala Glu Lys His Gly Phe  
370 375 380

Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr Val Asp Met  
385 390 395 400

Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu Glu Ala Asp  
405 410 415

Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu Leu Met Lys  
420 425 430

Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu Ser Met Ala  
435 440 445

Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu Met Leu Gln  
450 455 460

Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser Arg Ala Thr  
465 470 475 480

Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser Met Gly Met

485	490	495
Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu Glu Asp Val		
500	505	510
Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp Leu Ala Ser		
515	520	525
Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala Pro Gly Ala		
530	535	540
His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Val Phe Ala Glu		
545	550	555
Lys Ser Gln Glu Arg Pro Gly Asn Phe Tyr Val Ser Ser Glu Ser Ile		
565	570	575
Arg Lys Gly Pro Pro Val Arg Pro Trp Arg Asp Arg Pro Gln Ser Ser		
580	585	590
Ile Tyr Asp Pro Phe Ala Gly Met Lys Thr Pro Gly Gln Arg Gln Leu		
595	600	605
Ile Thr Leu Gln Glu Gln Val Lys Leu Gly Ile Val Asn Val Asp Glu		
610	615	620
Ala Val Leu His Phe Lys Glu Trp Gln Leu Asn Gln Lys Lys Arg Ser		
625	630	635
Glu Ser Phe Arg Phe Gln Gln Glu Asn Leu Lys Arg Leu Arg Asp Ser		
645	650	655
Ile Thr Arg Arg Gln Arg Glu Lys Gln Lys Ser Gly Lys Gln Thr Asp		
660	665	670
Leu Glu Ile Thr Val Pro Ile Arg His Ser Gln His Leu Pro Ala Lys		
675	680	685
Val Glu Phe Gly Val Tyr Glu Ser Gly Pro Arg Lys Ser Val Ile Pro		
690	695	700
Pro Arg Thr Glu Leu Arg Arg Gly Asp Trp Lys Thr Asp Ser Thr Ser		
705	710	715
		720



Ser Thr Ala Ser Ser Thr Ser Asn Arg Ser Ser Thr Arg Ser Leu Leu  
                     725                    730                    735  
 Ser Val Ser Ser Gly Met Glu Gly Asp Asn Glu Asp Asn Glu Val Pro  
                     740                    745                    750  
 Glu Val Thr Arg Ser Arg Ser Pro Gly Pro Pro Gln Val Asp Gly Thr  
                     755                    760                    765  
 Pro Thr Met Ser Leu Glu Arg Pro Pro Arg Val Pro Pro Arg Ala Ala  
                     770                    775                    780  
 Ser Gln Arg Pro Pro Thr Arg Glu Thr Phe His Pro Pro Pro Pro Val  
 785                    790                    795                    800  
 Pro Pro Arg Gly Arg  
                     805

<210> 3542

<211> 296

<212> PRT

<213> Homo sapiens

<400> 3542

Met Gly Trp Gly Cys Arg Val Pro Gly Trp Gly Gly Ala Ala Leu Gly  
     1                    5                    10                    15  
 Arg Pro Asp Phe Gly Thr Gly Leu Arg Ala Arg Val Ser Gly Pro Gly  
                     20                    25                    30  
 Ser Ala Gly Phe Arg Ala Glu Lys Glu Gly Gln Arg Lys Arg Ser Gly  
                     35                    40                    45  
 Ser Pro Pro Ala Pro Ala Ser Leu Pro Glu Tyr Lys Pro Leu Glu Ala  
                     50                    55                    60  
 Arg Phe Trp Val Ala Ala Ala Gln Pro Phe Arg Ser Pro Leu Leu Pro

出証特 2 0 0 4 - 3 0 5 9 6 6 0

&lt;210&gt; 3543

&lt;211&gt; 377

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3543

Met Ala Thr Ile Pro Asp Trp Lys Leu Gln Leu Leu Ala Arg Arg Arg  
 1 5 10 15  
 Gln Glu Glu Ala Ser Val Arg Gly Arg Glu Lys Ala Glu Arg Glu Arg  
 20 25 30  
 Leu Ser Gln Met Pro Ala Trp Lys Arg Gly Leu Leu Glu Arg Arg Arg  
 35 40 45  
 Ala Lys Leu Gly Leu Ser Pro Gly Glu Pro Ser Pro Val Leu Gly Thr  
 50 55 60  
 Val Glu Ala Gly Pro Pro Asp Pro Asp Glu Ser Ala Val Leu Leu Glu  
 65 70 75 80  
 Thr Ile Gly Pro Val His Gln Asn Arg Phe Ile Arg Gln Glu Arg Gln  
 85 90 95  
 Gln Gln Gln Gln Gln Gln Gln Arg Ser Glu Glu Leu Leu Ala Glu Arg  
 100 105 110  
 Lys Pro Gly Pro Leu Glu Ala Arg Glu Arg Arg Pro Ser Pro Gly Glu  
 115 120 125  
 Met Arg Asp Gln Ser Pro Lys Gly Arg Glu Ser Arg Glu Glu Arg Leu  
 130 135 140  
 Ser Pro Arg Glu Thr Arg Glu Arg Arg Leu Gly Ile Gly Gly Ala Gln  
 145 150 155 160  
 Glu Leu Ser Leu Arg Pro Leu Glu Ala Arg Asp Trp Arg Gln Ser Pro

	165	170	175
Gly Glu Val Gly Asp Arg Ser Ser Arg Leu Ser Glu Ala Trp Lys Trp			
	180	185	190
Arg Leu Ser Pro Gly Glu Thr Pro Glu Arg Ser Leu Arg Leu Ala Glu			
	195	200	205
Ser Arg Glu Gln Ser Pro Arg Arg Lys Glu Val Glu Ser Arg Leu Ser			
	210	215	220
Pro Gly Glu Ser Ala Tyr Gln Lys Leu Gly Leu Thr Gly Ala His Lys			
225	230	235	240
Trp Arg Pro Asp Ser Arg Glu Ser Gln Glu Gln Ser Leu Val Gln Leu			
	245	250	255
Glu Ala Thr Glu Trp Arg Leu Arg Ser Gly Glu Glu Arg Gln Asp Tyr			
	260	265	270
Ser Glu Glu Cys Gly Arg Lys Glu Glu Trp Pro Val Pro Gly Val Ala			
	275	280	285
Pro Lys Glu Thr Ala Glu Leu Ser Glu Thr Leu Thr Arg Glu Ala Gln			
	290	295	300
Gly Asn Ser Ser Ala Gly Val Glu Ala Ala Glu Gln Arg Pro Val Glu			
305	310	315	320
Asp Gly Glu Arg Gly Met Lys Pro Thr Glu Gly Trp Lys Trp Thr Leu			
	325	330	335
Ile Met Ser Leu Ala Gly Lys Gly Asn Gln His Leu Val Thr Cys Phe			
	340	345	350
Pro His Pro Val Ser Gly Gly Arg Ala Asn Cys Pro Ile Ser Thr Leu			
	355	360	365
Ile Gln Ser Pro Trp Cys Gly Trp Gly			
	370	375	

&lt;210&gt; 3544

&lt;211&gt; 1215

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3544

Met Glu Ile Gln Val Met Ile Gln Phe Leu Pro Val Ile Leu Met Gln

1 5 10 15

Leu Phe Arg Val Leu Thr Asn Met Thr His Glu Asp Asp Val Pro Ile

20 25 30

Asn Cys Thr Met Val Leu Leu His Ile Val Ser Lys Cys His Glu Glu

35 40 45

Gly Leu Asp Ser Tyr Leu Arg Ser Phe Ile Lys Tyr Ser Phe Arg Pro

50 55 60

Glu Lys Pro Ser Ala Pro Gln Ala Gln Leu Ile His Glu Thr Leu Ala

65 70 75 80

Thr Thr Met Ile Ala Ile Leu Lys Gln Ser Ala Asp Phe Leu Ser Ile

85 90 95

Asn Lys Leu Leu Lys Tyr Ser Trp Phe Phe Phe Glu Ile Ile Ala Lys

100 105 110

Ser Met Ala Thr Tyr Leu Leu Glu Glu Asn Lys Ile Lys Leu Pro Arg

115 120 125

Gly Gln Arg Phe Pro Glu Thr Tyr His His Val Leu His Ser Leu Leu

130 135 140

Leu Ala Ile Ile Pro His Val Thr Ile Arg Tyr Ala Glu Ile Pro Asp

145 150 155 160

Glu Ser Arg Asn Val Asn Tyr Ser Leu Ala Ser Phe Leu Lys Arg Cys

165 170 175

Leu Thr Leu Met Asp Arg Gly Phe Ile Phe Asn Leu Ile Asn Asp Tyr

180	185	190
Ile Ser Gly Phe Ser Pro Lys Asp	Pro Lys Val Leu Ala Glu Tyr Lys	
195	200	205
Phe Glu Phe Leu Gln Thr Ile Cys Asn His Glu His Tyr Ile Pro Leu		
210	215	220
Asn Leu Pro Met Ala Phe Ala Lys Pro Lys Leu Gln Arg Val Gln Asp		
225	230	235
Ser Asn Leu Glu Tyr Ser Leu Ser Asp Glu Tyr Cys Lys His His Phe		
245	250	255
Leu Val Gly Leu Leu Leu Arg Glu Thr Ser Ile Ala Leu Gln Asp Asn		
260	265	270
Tyr Glu Ile Arg Tyr Thr Ala Ile Ser Val Ile Lys Asn Leu Leu Ile		
275	280	285
Lys His Ala Phe Asp Thr Arg Tyr Gln His Lys Asn Gln Gln Ala Lys		
290	295	300
Ile Ala Gln Leu Tyr Leu Pro Phe Val Gly Leu Leu Leu Glu Asn Ile		
305	310	315
Gln Arg Leu Ala Gly Arg Asp Thr Leu Tyr Ser Cys Ala Ala Met Pro		
325	330	335
Asn Ser Ala Ser Arg Asp Glu Phe Pro Cys Gly Phe Thr Ser Pro Ala		
340	345	350
Asn Arg Gly Ser Leu Ser Thr Asp Lys Asp Thr Ala Tyr Gly Ser Phe		
355	360	365
Gln Asn Gly His Gly Ile Lys Arg Glu Asp Ser Arg Gly Ser Leu Ile		
370	375	380
Pro Glu Gly Ala Thr Gly Phe Pro Asp Gln Gly Asn Thr Gly Glu Asn		
385	390	395
Thr Arg Gln Ser Ser Thr Arg Ser Ser Val Ser Gln Tyr Asn Arg Leu		
405	410	415

Asp Gln Tyr Glu Ile Arg Ser Leu Leu Met Cys Tyr Leu Tyr Ile Val  
420 425 430  
Lys Met Ile Ser Glu Asp Thr Leu Leu Thr Tyr Trp Asn Lys Val Ser  
435 440 445  
Pro Gln Glu Leu Ile Asn Ile Leu Ile Leu Leu Glu Val Cys Leu Phe  
450 455 460  
His Phe Arg Tyr Met Gly Lys Arg Asn Ile Ala Arg Val His Asp Ala  
465 470 475 480  
Trp Leu Ser Lys His Phe Gly Ile Asp Arg Lys Ser Gln Thr Met Pro  
485 490 495  
Ala Leu Arg Asn Arg Ser Gly Val Met Gln Ala Arg Leu Gln His Leu  
500 505 510  
Ser Ser Leu Glu Ser Ser Phe Thr Leu Asn His Ser Ser Thr Thr Thr  
515 520 525  
Glu Ala Asp Ile Phe His Gln Ala Leu Leu Glu Gly Asn Thr Ala Thr  
530 535 540  
Glu Val Ser Leu Thr Val Leu Asp Thr Ile Ser Phe Phe Thr Gln Cys  
545 550 555 560  
Phe Lys Thr Gln Leu Leu Asn Asn Asp Gly His Asn Pro Leu Met Lys  
565 570 575  
Lys Val Phe Asp Ile His Leu Ala Phe Leu Lys Asn Gly Gln Ser Glu  
580 585 590  
Val Ser Leu Lys His Val Phe Ala Ser Leu Arg Ala Phe Ile Ser Lys  
595 600 605  
Phe Pro Ser Ala Phe Phe Lys Gly Arg Val Asn Met Cys Ala Ala Phe  
610 615 620  
Cys Tyr Glu Val Leu Lys Cys Cys Thr Ser Lys Ile Ser Ser Thr Arg  
625 630 635 640  
Asn Glu Ala Ser Ala Leu Leu Tyr Leu Leu Met Arg Asn Asn Phe Glu

645	650	655
Tyr Thr Lys Arg Lys Thr Phe Leu Arg Thr His Leu Gln Ile Ile Ile		
660	665	670
Ala Val Ser Gln Leu Ile Ala Asp Val Ala Leu Ser Gly Gly Ser Arg		
675	680	685
Phe Gln Glu Ser Leu Phe Ile Ile Asn Asn Phe Ala Asn Ser Asp Arg		
690	695	700
Pro Met Lys Ala Thr Ala Phe Pro Ala Glu Val Lys Asp Leu Thr Lys		
705	710	715
Arg Ile Arg Thr Val Leu Met Ala Thr Ala Gln Met Lys Glu His Glu		
725	730	735
Lys Asp Pro Glu Met Leu Ile Asp Leu Gln Tyr Ser Leu Ala Lys Ser		
740	745	750
Tyr Ala Ser Thr Pro Glu Leu Arg Lys Thr Trp Leu Asp Ser Met Ala		
755	760	765
Lys Ile His Val Lys Asn Gly Asp Phe Ser Glu Ala Ala Met Cys Tyr		
770	775	780
Val His Val Ala Ala Leu Val Ala Glu Phe Leu His Arg Lys Lys Leu		
785	790	795
Phe Pro Asn Gly Cys Ser Ala Phe Lys Lys Ile Thr Pro Asn Ile Asp		
805	810	815
Glu Glu Gly Ala Met Lys Glu Asp Ala Gly Met Met Asp Val His Tyr		
820	825	830
Ser Glu Glu Val Leu Leu Glu Leu Leu Glu Gln Cys Val Asp Gly Leu		
835	840	845
Trp Lys Ala Glu Arg Tyr Glu Ile Ile Ser Glu Ile Ser Lys Leu Ile		
850	855	860
Val Pro Ile Tyr Glu Lys Arg Arg Glu Phe Glu Lys Leu Thr Gln Val		
865	870	875
		880



Tyr Arg Thr Leu His Gly Ala Tyr Thr Lys Ile Leu Glu Val Met His  
885 890 895  
Thr Lys Lys Arg Leu Leu Gly Thr Phe Phe Arg Val Ala Phe Tyr Gly  
900 905 910  
Gln Ser Phe Phe Glu Glu Glu Asp Gly Lys Glu Tyr Ile Tyr Lys Glu  
915 920 925  
Pro Lys Leu Thr Gly Leu Ser Glu Ile Ser Leu Arg Leu Val Lys Leu  
930 935 940  
Tyr Gly Glu Lys Phe Gly Thr Glu Asn Val Lys Ile Ile Gln Asp Ser  
945 950 955 960  
Asp Lys Val Asn Ala Lys Glu Leu Asp Pro Lys Tyr Ala His Ile Gln  
965 970 975  
Val Thr Tyr Val Lys Pro Tyr Phe Asp Asp Lys Glu Leu Thr Glu Arg  
980 985 990  
Lys Thr Glu Phe Glu Arg Asn His Asn Ile Ser Arg Phe Val Phe Glu  
995 1000 1005  
Ala Pro Tyr Thr Leu Ser Gly Lys Lys Gln Gly Cys Ile Glu Glu Gln  
1010 1015 1020  
Cys Lys Arg Arg Thr Ile Leu Thr Thr Ser Asn Ser Phe Pro Tyr Val  
1025 1030 1035 1040  
Lys Lys Arg Ile Pro Ile Asn Cys Glu Gln Gln Ile Asn Leu Lys Pro  
1045 1050 1055  
Ile Asp Val Ala Thr Asp Glu Ile Lys Asp Lys Thr Ala Glu Leu Gln  
1060 1065 1070  
Lys Leu Cys Ser Ser Thr Asp Val Asp Met Ile Gln Leu Gln Leu Lys  
1075 1080 1085  
Leu Gln Gly Cys Val Ser Val Gln Val Asn Ala Gly Pro Leu Ala Tyr  
1090 1095 1100  
Ala Arg Ala Phe Leu Asn Asp Ser Gln Ala Ser Lys Tyr Pro Pro Lys

1105	1110	1115	1120
Lys Val Ser Glu Leu Lys Asp Met Phe Arg Lys Phe Ile Gln Ala Cys			
	1125	1130	1135
Ser Ile Ala Leu Glu Leu Asn Glu Arg Leu Ile Lys Glu Asp Gln Val			
	1140	1145	1150
Glu Tyr His Glu Gly Leu Lys Ser Asn Phe Arg Asp Met Val Lys Glu			
	1155	1160	1165
Leu Ser Asp Ile Ile His Glu Gln Ile Leu Gln Glu Asp Thr Met His			
	1170	1175	1180
Ser Pro Trp Met Ser Asn Thr Leu His Val Phe Cys Ala Ile Ser Gly			
1185	1190	1195	1200
Thr Ser Ser Asp Arg Gly Tyr Gly Ser Pro Arg Tyr Ala Glu Val			
	1205	1210	1215

&lt;210&gt; 3545

&lt;211&gt; 267

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3545

Met His Tyr Ile Lys Thr Trp Ser Leu Leu Gly Glu Met Ser Glu Lys			
1	5	10	15
Leu Arg Arg Cys Arg Lys Glu Leu Thr Ala Ala Ile Asp Arg Ala Phe			
	20	25	30
Glu Gly Val Ser Tyr Ser Gln Glu Cys Thr Gly Gln Gln Arg Leu Glu			
	35	40	45
Leu Ser Ala Ala Pro Leu Ser Phe Ser Leu Pro Val His Arg Leu Leu			
	50	55	60

Cys Arg Arg His Pro Leu Ala Ala Cys Ser Ser Ala Ala Pro Phe Ala  
 65 70 75 80  
 Ala Val Pro Cys Ala Pro Glu Asn Glu Asn Pro Ala Phe Ala Thr Asn  
 85 90 95  
 His Ala Pro Val Asn Ala Lys Pro His Ala Leu Cys Pro Glu Arg Lys  
 100 105 110  
 Pro Leu Thr Ser Lys Glu Asn Val Leu Met His Ser Ser Ile Leu Ala  
 115 120 125  
 Pro Glu Arg Glu Ser Trp Arg Thr Ala Gly Glu Gly Glu Asn Trp Arg  
 130 135 140  
 Lys Glu Asn Leu Arg Lys Asp Met Glu Arg Asp Leu Lys Ala Asp Ser  
 145 150 155 160  
 Asn Met Pro Leu Asn Asn Ser Ser Gln Glu Val Thr Lys Asp Leu Leu  
 165 170 175  
 Asp Met Ile Asp His Thr Ser Ile Arg Thr Ile Glu Glu Leu Ala Gly  
 180 185 190  
 Lys Ile Glu Phe Glu Asn Glu Leu Asn His Met Cys Gly His Cys Gln  
 195 200 205  
 Asp Ser Pro Phe Lys Glu Glu Ala Trp Ala Leu Leu Met Asp Lys Ser  
 210 215 220  
 Pro Gln Lys Ala Thr Asp Ala Asp Pro Gly Ser Leu Lys Gln Ala Phe  
 225 230 235 240  
 Asp Asp His Asn Ile Val Glu Thr Val Leu Asp Leu Glu Glu Asp Tyr  
 245 250 255  
 Asn Val Met Thr Ser Phe Lys Tyr Gln Ile Glu  
 260 265

&lt;210&gt; 3546

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3546

Met Gly Val Cys Arg Thr Gln Tyr Phe Val Thr Gln Val Leu Ser Leu

1 5 10 15

Val Pro Ile Ser Tyr Phe Ser Trp Ser Ser Pro Phe Ser His Pro Gly

20 25 30

Thr Lys Phe Trp Thr Gln Leu Lys Phe Ile Cys Gln Thr Leu Val Lys

35 40 45

Leu Gly Leu Phe Pro Pro Gln Glu Ser Gly Ile Arg Asp Leu Ile Pro

50 55 60

Gly Ser Val Ile Asp Ala Thr Met Phe Asn Pro Cys Gly Tyr Ser Met

65 70 75 80

Asn Gly Met Lys Ser Asp Gly Thr Tyr Trp Thr Ile His Ile Thr Pro

85 90 95

Glu Pro Glu Phe Ser Tyr Val Ser Phe Glu Thr Asn Leu Ser Gln Thr

100 105 110

Ser Tyr Asp Asp Leu Ile Arg Lys Val Val Glu Val Phe Lys Pro Gly

115 120 125

Lys Phe Val Thr Thr Leu Phe Val Asn Gln Ser Ser Lys Cys Arg Thr

130 135 140

Val Leu Ala Ser Pro Gln Lys Ile Glu Gly Phe Lys Arg Leu Asp Cys

145 150 155 160

Gln Ser Ala Met Phe Asn Asp Tyr Asn Phe Val Phe Thr Ser Phe Ala

165 170 175

Lys Lys Gln Gln Gln Gln Ser

180

&lt;210&gt; 3547

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3547

Met Met Tyr Val Pro Gln Asn Gln Val Ile Leu Ser Val Leu Phe Gln  
1 5 10 15  
Tyr Phe Phe Val Asn Leu Trp Ser Cys Ala Pro Ile Thr Thr Ile Pro  
20 25 30  
Ile Leu Glu Arg Leu Tyr His Phe Leu Phe Pro Ser Pro Ala Leu Cys  
35 40 45  
Asn His Glu Ser Ala Phe Cys Leu Tyr Gly Phe Ala Phe Phe Arg His  
50 55 60  
Leu Tyr Gln Trp Gln Leu Thr Val His Gly Leu His Ala Trp Leu Leu  
65 70 75 80  
Ser Leu Ser Ile Leu Phe Pro Arg Phe Ile His Val Val Ala Cys Gly  
85 90 95  
Ser Ala Ser Phe Leu Ser Val Ala Glu Glu Tyr Ser Ile Val Trp Thr  
100 105 110  
Asp Arg Val Leu Ile Ile His Ser Ser Val Asp Gly His Arg Gly Cys  
115 120 125  
Phe His Leu Pro  
130

&lt;210&gt; 3548

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3548

Met Ala Cys His Phe Tyr Leu Ser Thr Ser Ala His Gln Leu Met Pro

1 5 10 15

Leu Ile His Ala Pro Phe Cys Cys Ser Pro Leu His Ser Trp Gln Pro

20 25 30

Leu His Ser Ile His Pro Phe Pro Gln Thr Trp Ala Cys Cys Tyr Gln

35 40 45

Gln Gly Ala Val Met Asp Pro Ser Gln Gly Pro Leu Ile Pro Arg Ala

50 55 60

Ser Leu Ser Leu Gly Ser Ser Ser Gln His Cys Trp Ser Gly Gly Thr

65 70 75 80

His Thr His Ile Phe Pro Lys Cys Tyr Gln Cys Tyr Gly Val Ile Arg

85 90 95

Asn Phe Ile Tyr Leu Phe Phe Ala Asn Met Ile Ala Ile Lys Leu Pro

100 105 110

His Leu Tyr

115

&lt;210&gt; 3549

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3549

Met Ala Ser Pro Asp Pro Pro Ala Thr Ser Tyr Ala Pro Ser Asp Val  
 1 5 10 15  
 Pro Ser Gly Val Ala Leu Phe Leu Thr Ile Pro Phe Ala Phe Phe Leu  
 20 25 30  
 Pro Glu Leu Ile Phe Gly Phe Leu Val Trp Thr Met Val Ala Ala Thr  
 35 40 45  
 His Ile Val Tyr Pro Leu Leu Gln Gly Trp Val Met Tyr Val Ser Leu  
 50 55 60  
 Thr Ser Phe Leu Ile Ser Leu Met Phe Leu Leu Ser Tyr Leu Phe Gly  
 65 70 75 80  
 Phe Tyr Lys Arg Phe Glu Ser Trp Arg Val Leu Asp Ser Leu Tyr His  
 85 90 95  
 Gly Thr Thr Gly Ile Leu Tyr Met Ser Ala Ala Val Leu Gln Val His  
 100 105 110  
 Ala Thr Ile Val Ser Glu Lys Leu Leu Asp Pro Arg Ile Tyr Tyr Ile  
 115 120 125  
 Asn Ser Ala Ala Ser Phe Phe Ala Phe Ile Ala Thr Leu Leu Tyr Ile  
 130 135 140  
 Leu His Ala Phe Ser Ile Tyr Tyr His  
 145 150

&lt;210&gt; 3550

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3550

Met Val Cys Asp Phe Thr Pro Leu Cys Leu Ile Ile Cys Gln Gln Thr

1	5	10	15
Tyr Trp Ala Lys His Lys Trp Leu Arg His Ser Trp Pro Ile Ser Cys			
20	25	30	
His Arg Cys His Pro Gln Arg Gln Thr Leu Gly Asn Asn Leu Gly Thr			
35	40	45	
Ala Ser Ser Pro Cys Gln Val Met Ala Ser Ser Ala Ser Gln His Val			
50	55	60	
Pro Gly Leu Pro Leu Gly Ala Gly Phe Ser Ala Gly Leu Arg Asp Ser			
65	70	75	80
Trp Lys Glu Pro Gln Gly Lys Val Arg Arg Ser Ser Trp Tyr Arg Leu			
85	90	95	
Met Thr Lys Glu Arg Thr Arg Lys Ala Ala Trp Val Trp Trp Lys Phe			
100	105	110	
Gln Cys Asn Val Ile Pro Ser Arg His Ile Cys Asp Ser Leu Lys			
115	120	125	

&lt;210&gt; 3551

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3551

Met Phe Thr Glu Tyr Gln Ala Leu Lys Gly Gln Asn His Pro Pro Thr			
1	5	10	15
Gly Pro Ala Leu Gly Pro Gly His Pro Ala Gly Ala Gly Cys Ala Glu			
20	25	30	
Arg His Ala Glu Val Arg Ala Gly Ala Asp Arg Glu Cys Phe Gly Glu			
35	40	45	



Ala Pro Leu Tyr Pro Asn Thr Cys Cys Ile Val Cys Val Ser Leu Asn  
 50 55 60  
 Arg Val Thr Ala Ala Gly Val Val Leu Tyr Arg Glu Pro Cys Pro Arg  
 65 70 75 80  
 Ala Leu Ser Phe Pro Phe Leu His Phe Leu Phe Tyr Ala Gln Phe Ser  
 85 90 95  
 Ser Leu Gly Thr Val Leu Leu Phe Phe Ser Phe Ser Phe Pro His Leu  
 100 105 110  
 Ile Ile Phe Ile Pro  
 115

<210> 3552

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3552

Met Ile Cys Tyr Ser Leu Gly Leu Gln Pro Pro Leu Leu Pro Gln His  
 1 5 10 15  
 Val Leu Cys Thr Val Ala Ile Leu Ser Ser Phe Gly Ser Ala Pro Ile  
 20 25 30  
 Val Cys Ser Leu Lys Phe Leu Ala Pro Leu Ser Met Ser Ser Val Phe  
 35 40 45  
 Arg Met Pro Phe Ser Ile Ser Ser Tyr Leu Cys Pro Ala Thr Leu His  
 50 55 60  
 Leu Thr Ser Pro Leu Phe Lys Leu Phe Ile Ser Pro Phe Leu Thr Leu  
 65 70 75 80  
 Leu Gly Phe Ser Leu Arg Pro Lys Ser Phe Leu Gln Val Leu Pro Lys

85 90 95  
 Pro Pro Lys Ser Gln Leu Ile  
 100

<210> 3553

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3553

Met Pro Ser Ser Val Ala Gly Glu Thr Ser Val Leu Ala Val Pro Ser  
 1 5 10 15  
 Trp Arg Asp His Ser Val Glu Pro Leu Arg Asp Pro Asn Pro Ser Asp  
 20 25 30  
 Leu Leu Glu Asn Leu Asp Asp Ser Val Phe Ser Lys Arg His Ala Lys  
 35 40 45  
 Leu Glu Leu Asp Glu Lys Arg Arg Lys Arg Trp Asp Ile Gln Arg Ile  
 50 55 60  
 Arg Glu Gln Arg Ile Leu Gln Arg Leu Gln Leu Arg Met Tyr Lys Lys  
 65 70 75 80  
 Lys Gly Ile Gln Glu Ser Glu Pro Glu Val Thr Ser Phe Phe Pro Glu  
 85 90 95  
 Pro Asp Asp Val Glu Ser Leu Met Ile Thr Pro Phe Leu Pro Val Val  
 100 105 110  
 Ala Phe Gly Arg Pro Leu Pro Lys Leu Thr Pro Gln Asn Phe Glu Leu  
 115 120 125  
 Pro Trp Leu Asp Glu Arg Ser Arg Cys Arg Leu Glu Ile Gln Lys Lys  
 130 135 140

Gln Thr Pro His Arg Thr Cys Arg Lys

145

150

<210> 3554

<211> 1099

<212> PRT

<213> Homo sapiens

<400> 3554

Met Leu Arg Ser Asp Ser Glu Asn Ile Leu Thr Asn Tyr Glu Asn Gln

1

5

10

15

Ser Arg Val Glu Thr Asn Glu Arg Ala Asn Glu Cys Ser His Ser Lys

20

25

30

Asn Ile Gln Asn Phe Pro Ser Asp Leu Ile Glu Asn Pro Ile Met Lys

35

40

45

Ser Lys Met Ser Lys Phe Tyr Gly Val Asn Glu Thr Glu Asn Glu Asp

50

55

60

Asn Thr Asn Arg Asp Ser Pro Ile Phe Asp Tyr Ser Pro Arg Leu Ser

65

70

75

80

Ala Leu Leu Ser His Asp Lys Leu Met His Ser Gln Gly Ser Phe Asn

85

90

95

Asp Thr His Thr Pro Glu Ser Asn Gly Asn Lys Cys Glu Ala Pro Ala

100

105

110

Leu Ser Phe Ser Asp Lys Thr Met Leu Ser Gly Gln Arg Ile Gly Glu

115

120

125

Lys Phe Gln Asp Gln Phe Leu Gly Ile Ala Ala Ile Asn Ile Ser Leu

130

135

140

Pro Gly Glu Gln Tyr Gly Gln Lys Ser Leu Asn Met Ile Ser Ser Asn

145                      150                      155                      160  
Pro Gln Val Gln Tyr His Asn Asp Lys Tyr Ile Ser Asn Thr Ser Gly  
                         165                      170                      175  
Glu Asp Glu Lys Thr His Pro Gly Phe Gln Gln Met Pro Glu Asp Lys  
                         180                      185                      190  
Glu Asp Glu Ser Glu Ile Glu Glu Tyr Ser Cys Ala Val Thr Pro Gly  
                         195                      200                      205  
Gly Asp Thr Asp Asn Ala Ile Val Ser Leu Thr Cys Ala Thr Pro Leu  
                         210                      215                      220  
Leu Asp Glu Thr Ile Ser Ala Ser Asp Tyr Glu Thr Ser Leu Leu Asn  
225                      230                      235                      240  
Asp Gln Gln Asn Asn Thr Gly Thr Asp Thr Asp Ser Asp Asp Asp Phe  
                         245                      250                      255  
Tyr Asp Thr Pro Leu Phe Glu Asp Asp Asp His Asp Ser Leu Leu Leu  
                         260                      265                      270  
Asp Gly Asp Asp Arg Asp Cys Leu His Pro Glu Asp Tyr Asp Thr Leu  
                         275                      280                      285  
Gln Glu Glu Asn Asp Glu Thr Ala Ser Pro Ala Asp Val Phe Tyr Asp  
                         290                      295                      300  
Val Ser Lys Glu Asn Glu Asn Ser Met Val Pro Gln Gly Ala Pro Val  
305                      310                      315                      320  
Gly Ser Leu Ser Val Lys Asn Lys Ala His Cys Leu Gln Asp Phe Leu  
                         325                      330                      335  
Met Asp Val Glu Lys Asp Glu Leu Asp Ser Gly Glu Lys Ile His Leu  
                         340                      345                      350  
Asn Pro Val Gly Ser Asp Lys Val Asn Gly Gln Ser Leu Glu Thr Gly  
                         355                      360                      365  
Ser Glu Arg Glu Cys Thr Asn Ile Leu Glu Gly Asp Glu Ser Asp Ser  
                         370                      375                      380

Leu Thr Asp Tyr Asp Ile Val Gly Gly Lys Glu Ser Phe Thr Ala Ser  
385 390 395 400  
Leu Lys Phe Asp Asp Ser Gly Ser Trp Arg Gly Arg Lys Glu Glu Tyr  
405 410 415  
Val Thr Gly Gln Glu Phe His Ser Asp Thr Asp His Leu Asp Ser Met  
420 425 430  
Gln Ser Glu Glu Ser Tyr Gly Asp Tyr Ile Tyr Asp Ser Asn Asp Gln  
435 440 445  
Asp Asp Asp Asp Asp Asp Gly Ile Asp Glu Glu Gly Gly Gly Ile Arg  
450 455 460  
Asp Glu Asn Gly Lys Pro Arg Cys Gln Asn Val Ala Glu Asp Met Asp  
465 470 475 480  
Ile Gln Leu Cys Ala Ser Ile Leu Asn Glu Asn Ser Asp Glu Asn Glu  
485 490 495  
Asn Ile Asn Thr Met Ile Leu Leu Asp Lys Val His Ser Cys Ser Ser  
500 505 510  
Leu Glu Lys Gln Gln Arg Val Asn Val Val Gln Leu Ala Ser Pro Ser  
515 520 525  
Glu Asn Asn Leu Val Thr Glu Lys Ser Asn Leu Pro Glu Tyr Thr Thr  
530 535 540  
Glu Ile Ala Gly Lys Ser Lys Glu Asn Leu Leu Asn His Glu Met Val  
545 550 555 560  
Leu Lys Asp Val Leu Pro Pro Ile Ile Lys Asp Thr Glu Ser Glu Lys  
565 570 575  
Thr Phe Gly Pro Ala Ser Ile Ser His Asp Asn Asn Asn Ile Ser Ser  
580 585 590  
Thr Ser Glu Leu Gly Thr Asp Leu Ala Asn Thr Lys Val Lys Leu Ile  
595 600 605  
Gln Gly Ser Glu Leu Pro Glu Leu Thr Asp Ser Val Lys Gly Lys Asp

610                                  615                                  620  
Glu Tyr Phe Lys Asn Met Thr Pro Lys Val Asp Ser Ser Leu Asp His  
625                                  630                                  635                                  640  
Ile Ile Cys Thr Glu Pro Asp Leu Ile Gly Lys Pro Ala Glu Glu Ser  
                                645                                  650                                  655  
His Leu Ser Leu Ile Ala Ser Val Thr Asp Lys Asp Pro Gln Gly Asn  
                                660                                  665                                  670  
Gly Ser Asp Leu Ile Lys Gly Arg Asp Gly Lys Ser Asp Ile Leu Ile  
                                675                                  680                                  685  
Glu Asp Glu Thr Ser Ile Gln Lys Met Tyr Leu Gly Glu Gly Glu Val  
                                690                                  695                                  700  
Leu Val Glu Gly Leu Val Glu Glu Glu Asn Arg His Leu Lys Leu Leu  
705                                  710                                  715                                  720  
Pro Gly Lys Asn Thr Arg Asp Ser Phe Lys Leu Ile Asn Ser Gln Phe  
                                725                                  730                                  735  
Pro Phe Pro Gln Ile Thr Asn Asn Glu Glu Leu Asn Gln Lys Gly Ser  
                                740                                  745                                  750  
Leu Lys Lys Ala Thr Val Thr Leu Lys Asp Glu Pro Asn Asn Leu Gln  
                                755                                  760                                  765  
Ile Ile Val Ser Lys Ser Pro Val Gln Phe Glu Asn Leu Glu Glu Ile  
                                770                                  775                                  780  
Phe Asp Thr Ser Val Ser Lys Glu Ile Ser Asp Asp Ile Thr Ser Asp  
785                                  790                                  795                                  800  
Ile Thr Ser Trp Glu Gly Asn Thr His Phe Glu Glu Ser Phe Thr Asp  
                                805                                  810                                  815  
Gly Pro Glu Lys Glu Leu Asp Leu Phe Thr Tyr Leu Lys His Cys Ala  
                                820                                  825                                  830  
Lys Asn Ile Lys Ala Lys Asp Val Ala Lys Pro Asn Glu Asp Val Pro  
                                835                                  840                                  845

Ser His Val Leu Ile Thr Ala Pro Pro Met Lys Glu His Leu Gln Leu  
850 855 860  
Gly Val Asn Asn Thr Lys Glu Lys Ser Thr Ser Thr Gln Lys Asp Ser  
865 870 875 880  
Pro Leu Asn Asp Met Ile Gln Ser Asn Asp Leu Cys Ser Lys Glu Ser  
885 890 895  
Ile Ser Gly Gly Gly Thr Glu Ile Ser Gln Phe Thr Pro Glu Ser Ile  
900 905 910  
Glu Ala Thr Leu Ser Ile Leu Ser Arg Lys His Val Glu Asp Val Gly  
915 920 925  
Lys Asn Asp Phe Leu Gln Ser Glu Arg Cys Ala Asn Gly Leu Gly Asn  
930 935 940  
Asp Asn Ser Ser Asn Thr Leu Asn Thr Asp Tyr Ser Phe Leu Glu Ile  
945 950 955 960  
Asn Asn Lys Lys Glu Arg Ile Glu Gln Gln Leu Pro Lys Glu Gln Ala  
965 970 975  
Leu Ser Pro Arg Ser Gln Glu Lys Glu Val Gln Ile Pro Glu Leu Ser  
980 985 990  
Gln Val Phe Val Glu Asp Val Lys Asp Ile Leu Lys Ser Arg Leu Lys  
995 1000 1005  
Glu Gly His Met Lys Pro Gln Glu Val Glu Glu Pro Ser Ala Cys Ala  
1010 1015 1020  
Asp Thr Lys Ile Leu Ile Gln Asn Leu Ile Lys Arg Ile Thr Thr Ser  
1025 1030 1035 1040  
Gln Leu Val Asn Glu Ala Ser Thr Val Pro Ser Asp Ser Gln Met Ser  
1045 1050 1055  
Asp Ser Ser Gly Val Ser Pro Met Thr Asn Ser Ser Glu Leu Lys Pro  
1060 1065 1070  
Glu Ser Arg Asp Asp Pro Phe Cys Ile Gly Asn Leu Lys Ser Glu Leu

1075                      1080                      1085  
Leu Leu Asn Ile Leu Lys Gln Asp Gln His Ser  
1090                      1095

<210> 3555

<211> 265

<212> PRT

<213> Homo sapiens

<400> 3555

Met Gln Gln Thr Ala Pro Asn Thr Leu Pro Thr Ala Ser Met Ser Ile  
1                      5                      10                      15  
Ser Gly Pro Gly Tyr Ser His Ala Gly Pro Ala Ser Gln Gly Val Pro  
20                      25                      30  
Met Gln Gly Gln Gly Thr Ile Gly Asn Tyr Val Ser Arg Thr Asn Ile  
35                      40                      45  
Asn Met Gln Ser Asn Pro Val Ser Met Met Gln Gln Gln Ala Ala Thr  
50                      55                      60  
Ser His Tyr Ser Ser Ala Gln Gly Gly Ser Gln His Tyr Gln Gly Gln  
65                      70                      75                      80  
Ser Ser Ile Ala Met Met Gly Gln Gly Ser Gln Gly Ser Ser Met Met  
85                      90                      95  
Gly Gln Arg Pro Met Ala Pro Tyr Arg Pro Ser Gln Gln Gly Ser Ser  
100                      105                      110  
Gln Gln Tyr Leu Gly Gln Glu Glu Tyr Tyr Gly Glu Gln Tyr Ser His  
115                      120                      125  
Ser Gln Gly Ala Ala Glu Pro Met Gly Gln Gln Tyr Tyr Pro Asp Gly  
130                      135                      140



His Gly Asp Tyr Ala Tyr Gln Gln Ser Ser Tyr Thr Glu Gln Ser Tyr  
 145                      150                      155                      160  
 Asp Arg Ser Phe Glu Glu Ser Thr Gln His Tyr Tyr Glu Gly Gly Asn  
                          165                      170                      175  
 Ser Gln Tyr Ser Gln Gln Gln Ala Gly Tyr Gln Gln Gly Ala Ala Gln  
                          180                      185                      190  
 Gln Gln Thr Tyr Ser Gln Gln Gln Tyr Pro Ser Gln Gln Ser Tyr Pro  
                          195                      200                      205  
 Gly Gln Gln Gln Gly Tyr Gly Ser Ala Gln Gly Ala Pro Ser Gln Tyr  
                          210                      215                      220  
 Pro Gly Tyr Gln Gln Gly Gln Gly Gln Gln Tyr Gly Ser Tyr Arg Ala  
 225                      230                      235                      240  
 Pro Gln Thr Ala Pro Ser Ala Gln Gln Gln Arg Pro Tyr Gly Tyr Glu  
                          245                      250                      255  
 Gln Gly Gln Tyr Gly Asn Tyr Gln Gln  
                          260                      265

<210> 3556

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3556

Met Phe Ser Tyr Glu Lys Tyr Thr Leu Phe Ile Leu Ser Ser Ser Phe  
 1                      5                      10                      15  
 Phe Phe Phe Phe Arg Trp Ser Leu Ala Leu Val Thr Gln Ala Gly Val  
                          20                      25                      30  
 Gln Trp Arg Asn Leu Ser Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys

35                      40                      45  
 Arg Phe Ser Cys Ser Ser Leu Pro Tyr Ser Trp Asp Tyr Arg Cys Leu  
 50                      55                      60  
 Pro Pro Cys Pro Ala Asn Phe Cys Val Phe Ser Arg Asp Gly Val Ser  
 65                      70                      75                      80  
 Pro His Arg Pro Gly Ser Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro  
 85                      90                      95  
 Thr Leu Ala Ser Leu Asn Thr Gly Ile Thr Gly Val Ser His Cys Ile  
 100                      105                      110  
 Arg Pro His Phe Val Phe Phe Asn Ser Val Ile Gly Ile Ser Phe Phe  
 115                      120                      125  
 Phe Phe Phe Asn Val  
 130

&lt;210&gt; 3557

&lt;211&gt; 309

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3557

Met Ser Ser Cys Gln Gly Ser Leu His Gly Pro Arg Arg Pro Gln Pro  
 1                      5                      10                      15  
 Gly Ala Ser Gly Arg Ser Thr His Thr Asp Gly Gly Gly Ser Ser Pro  
 20                      25                      30  
 Ala Gly Glu Gln Glu Pro Ser Gln His Arg Thr Gly Ala Ala Val Gln  
 35                      40                      45  
 Arg Lys Pro Trp Pro Ser Gly Gly Leu Trp Arg Gln Asp Gln Gln Pro  
 50                      55                      60

Gly Pro Gly Glu Ala Pro His Thr Gln Ala Phe Gly Glu Trp Pro Trp  
65 70 75 80  
Gly Gln Glu Leu Gly Ser Arg Ala Pro Gly Leu Gly Gly Asp Ala Gly  
85 90 95  
Ser Pro Ala Pro Pro Phe His Ser Ser Ser Tyr Arg Ile Ser Leu Ala  
100 105 110  
Gly Val Glu Pro Ser Leu Val Gln Ala Ala Leu Gly Gln Leu Val Arg  
115 120 125  
Leu Ser Cys Ser Asp Asp Thr Ala Pro Glu Ser Gln Ala Ala Trp Gln  
130 135 140  
Lys Asp Gly Gln Pro Ile Ser Ser Asp Arg His Arg Leu Gln Phe Asp  
145 150 155 160  
Gly Ser Leu Ile Ile His Pro Leu Gln Ala Glu Asp Ala Gly Thr Tyr  
165 170 175  
Ser Cys Gly Ser Thr Arg Pro Gly Arg Asp Ser Gln Lys Ile Gln Leu  
180 185 190  
Arg Ile Ile Gly Gly Asp Met Ala Val Leu Ser Glu Ala Glu Leu Ser  
195 200 205  
Arg Phe Pro Gln Pro Arg Asp Pro Ala Gln Asp Phe Gly Gln Ala Gly  
210 215 220  
Ala Ala Gly Pro Leu Gly Ala Ile Pro Ser Ser His Pro Gln Pro Ala  
225 230 235 240  
Asn Arg Leu Arg Leu Asp Gln Asn Gln Pro Arg Val Val Asp Ala Ser  
245 250 255  
Pro Gly Gln Arg Ile Arg Met Thr Cys Arg Ala Glu Gly Phe Pro Pro  
260 265 270  
Pro Ala Ile Glu Trp Gln Arg Asp Gly Gln Pro Val Ser Ser Pro Ser  
275 280 285  
Thr His Arg Pro Ala Gln Gly Pro Trp Gln Gly Leu Arg Arg Pro Ala

290  
Arg Ala Gly Gln Leu  
305

295

300

&lt;210&gt; 3558

&lt;211&gt; 784

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3558

Met Pro His Thr Leu Trp Met Val Trp Val Leu Gly Val Ile Ile Ser  
1 5 10 15  
Leu Ser Lys Glu Glu Ser Ser Asn Gln Ala Ser Leu Ser Cys Asp Arg  
20 25 30  
Asn Gly Ile Cys Lys Gly Ser Ser Gly Ser Leu Asn Ser Thr Pro Ser  
35 40 45  
Gly Leu Thr Glu Ala Val Lys Ser Leu Asp Leu Ser Asn Asn Arg Ile  
50 55 60  
Thr Tyr Ile Ser Asn Ser Asp Leu Gln Arg Cys Val Asn Leu Gln Ala  
65 70 75 80  
Leu Val Leu Thr Ser Asn Gly Ile Asn Thr Ile Glu Glu Asp Ser Phe  
85 90 95  
Ser Ser Leu Gly Ser Leu Glu His Leu Asp Leu Ser Tyr Asn Tyr Leu  
100 105 110  
Ser Asn Leu Ser Ser Ser Trp Phe Lys Pro Leu Ser Ser Leu Thr Phe  
115 120 125  
Leu Asn Leu Leu Gly Asn Pro Tyr Lys Thr Leu Gly Glu Thr Ser Leu  
130 135 140

Phe Ser His Leu Thr Lys Leu Gln Ile Leu Arg Val Gly Asn Met Asp  
145 150 155 160  
Thr Phe Thr Lys Ile Gln Arg Lys Asp Phe Ala Gly Leu Thr Phe Leu  
165 170 175  
Glu Glu Leu Glu Ile Asp Ala Ser Asp Leu Gln Ser Tyr Glu Pro Lys  
180 185 190  
Ser Leu Lys Ser Ile Gln Asn Val Ser His Leu Ile Leu His Met Lys  
195 200 205  
Gln His Ile Leu Leu Leu Glu Ile Phe Val Asp Val Thr Ser Ser Val  
210 215 220  
Glu Cys Leu Glu Leu Arg Asp Thr Asp Leu Asp Thr Phe His Phe Ser  
225 230 235 240  
Glu Leu Ser Thr Gly Glu Thr Asn Ser Leu Ile Lys Lys Phe Thr Phe  
245 250 255  
Arg Asn Val Lys Ile Thr Asp Glu Ser Leu Phe Gln Val Met Lys Leu  
260 265 270  
Leu Asn Gln Ile Ser Gly Leu Leu Glu Leu Glu Phe Asp Asp Cys Thr  
275 280 285  
Leu Asn Gly Val Gly Asn Phe Arg Ala Ser Asp Asn Asp Arg Val Ile  
290 295 300  
Asp Pro Gly Lys Val Glu Thr Leu Thr Ile Arg Arg Leu His Ile Pro  
305 310 315 320  
Arg Phe Tyr Leu Phe Tyr Asp Leu Ser Thr Leu Tyr Ser Leu Thr Glu  
325 330 335  
Arg Val Lys Arg Ile Thr Val Glu Asn Ser Lys Val Phe Leu Val Pro  
340 345 350  
Cys Leu Leu Ser Gln His Leu Lys Ser Leu Glu Tyr Leu Asp Leu Ser  
355 360 365  
Glu Asn Leu Met Val Glu Glu Tyr Leu Lys Asn Ser Ala Cys Glu Asp

370 375 380  
Ala Trp Pro Ser Leu Gln Thr Leu Ile Leu Arg Gln Asn His Leu Ala  
385 390 395 400  
Ser Leu Glu Lys Thr Gly Glu Thr Leu Leu Thr Leu Lys Asn Leu Thr  
405 410 415  
Asn Ile Asp Ile Ser Lys Asn Ser Phe His Ser Met Pro Glu Thr Cys  
420 425 430  
Gln Trp Pro Glu Lys Met Lys Tyr Leu Asn Leu Ser Ser Thr Arg Ile  
435 440 445  
His Ser Val Thr Gly Cys Ile Pro Lys Thr Leu Glu Ile Leu Asp Val  
450 455 460  
Ser Asn Asn Asn Leu Asn Leu Phe Ser Leu Asn Leu Pro Gln Leu Lys  
465 470 475 480  
Glu Leu Tyr Ile Ser Arg Asn Lys Leu Met Thr Leu Pro Asp Ala Ser  
485 490 495  
Leu Leu Pro Met Leu Leu Val Leu Lys Ile Ser Arg Asn Ala Ile Thr  
500 505 510  
Thr Phe Ser Lys Glu Gln Leu Asp Ser Phe His Thr Leu Lys Thr Leu  
515 520 525  
Glu Ala Gly Gly Asn Asn Phe Ile Cys Ser Cys Glu Phe Leu Ser Phe  
530 535 540  
Thr Gln Glu Gln Gln Ala Leu Ala Lys Val Leu Ile Asp Trp Pro Ala  
545 550 555 560  
Asn Tyr Leu Cys Asp Ser Pro Ser His Val Arg Gly Gln Gln Val Gln  
565 570 575  
Asp Val Arg Leu Ser Val Ser Glu Cys His Arg Thr Ala Leu Val Ser  
580 585 590  
Gly Met Cys Cys Ala Leu Phe Leu Leu Ile Leu Leu Thr Gly Val Leu  
595 600 605

Cys His Arg Phe His Gly Leu Trp Tyr Met Lys Met Met Trp Ala Trp  
610 615 620  
Leu Gln Ala Lys Arg Lys Pro Arg Lys Ala Pro Ser Arg Asn Ile Cys  
625 630 635 640  
Tyr Asp Ala Phe Val Ser Tyr Ser Glu Arg Asp Ala Tyr Trp Val Glu  
645 650 655  
Asn Leu Met Val Gln Glu Leu Glu Asn Phe Asn Pro Pro Phe Lys Leu  
660 665 670  
Cys Leu His Lys Arg Asp Phe Ile Pro Gly Lys Trp Ile Ile Asp Asn  
675 680 685  
Ile Ile Asp Ser Ile Glu Lys Ser His Lys Thr Val Phe Val Leu Ser  
690 695 700  
Glu Asn Phe Val Lys Ser Glu Trp Cys Lys Tyr Glu Leu Asp Phe Ser  
705 710 715 720  
His Phe Arg Leu Phe Asp Glu Asn Asn Asp Ala Ala Ile Leu Ile Leu  
725 730 735  
Leu Glu Pro Ile Glu Lys Lys Ala Ile Pro Gln Arg Phe Cys Lys Leu  
740 745 750  
Arg Lys Ile Met Asn Thr Lys Thr Tyr Leu Glu Trp Pro Met Asp Glu  
755 760 765  
Ala Gln Arg Glu Gly Phe Trp Val Asn Leu Arg Ala Ala Ile Lys Ser  
770 775 780

&lt;210&gt; 3559

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3559

Met Lys Asp Arg Leu Glu Gln Leu Lys Ala Lys Gln Leu Thr Gln Asp  
 1 5 10 15  
 Asp Asp Thr Asp Ala Val Glu Ile Ala Ile Asp Asn Thr Ala Phe Met  
 20 25 30  
 Asp Glu Phe Phe Ser Glu Ile Glu Glu Thr Arg Leu Asn Ile Asp Lys  
 35 40 45  
 Ile Ser Glu His Val Glu Glu Ala Lys Lys Leu Tyr Ser Ile Ile Leu  
 50 55 60  
 Ser Ala Pro Ile Pro Glu Pro Lys Thr Lys Asp Asp Leu Glu Gln Leu  
 65 70 75 80  
 Thr Thr Glu Ile Lys Lys Arg Ala Asn Asn Val Arg Asn Lys Leu Lys  
 85 90 95  
 Ser Met Glu Lys His Ile Glu Glu Asp Glu Val Arg Ser Ser Ala Asp  
 100 105 110  
 Leu Arg Ile Arg Lys Ser Gln His Ser Val Leu Ser Arg Lys Phe Val  
 115 120 125  
 Glu Val Met Thr Lys Tyr Asn Glu Ala Gln Val Asp Phe Arg Glu Arg  
 130 135 140  
 Ser Lys Gly Arg Ile Gln Arg Gln Leu Glu Ile Thr Gly Lys Lys Thr  
 145 150 155 160  
 Thr Asp Glu Glu Leu Glu Glu Met Leu Glu Ser Gly Asn Pro Ala Ile  
 165 170 175  
 Phe Thr Ser Gly Ile Ile Asp Ser Gln Ile Ser Lys Gln Ala Leu Ser  
 180 185 190  
 Glu Ile Glu Gly Arg His Lys Asp Ile Val Arg Leu Glu Ser Ser Ile  
 195 200 205  
 Lys Glu Leu His Asp Met Phe Met Asp Ile Ala Met Leu Val Glu Asn  
 210 215 220



Asn

<213> Homo sapiens

Met	Ser	Ile	Tyr	Leu	Cys	Thr	Tyr	Met	Ala	Tyr	Phe	Ser	Thr	Gly	Ile
1				5					10					15	
Gln	Tyr	Ile	Ile	Val	Ala	Ser	Gly	Leu	Ser	Glu	Ala	Ser	Phe	Thr	His
			20					25					30		
Ser	Ile	Ser	Pro	Leu	Phe	Tyr	Lys	Gln	Ser	Lys	Pro	Thr	Leu	Phe	Lys
		35					40					45			
Asn	Phe	Leu	Leu	Leu	Leu	Phe	Leu	Leu	Leu	Leu	Gly	Arg	Ser	Leu	Ala
	50						55				60				
Leu	Ser	Pro	Arg	Leu	Glu	Cys	Ala	Val	Ser	Ala	His	Cys	Lys	Leu	His
65					70					75					80
Phe	Pro	Gly	Ser	Arg	His	Phe	Pro	Ala	Ser	Ala	Ser	Gln	Ala	Ala	Gly

	85		90		95										
Thr	Ala	Gly	Ala	Arg	His	His	Ala	Arg	Leu	Ile	Phe	Cys	Ile	Phe	Gly
	100		105		110										
Gly	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Ser	Pro	Asp
	115		120		125										
Leu	Val	Ile	Trp	Ser	Arg	Ser	Pro	Asp	Leu	Met	Ile	Cys	Leu	Pro	
	130		135		140										

&lt;210&gt; 3561

&lt;211&gt; 1229

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3561

Met	Met	Leu	Asn	Gly	Ala	Asp	Ala	Val	His	Phe	Arg	Val	Leu	Met	Lys
1			5				10						15		
Leu	Phe	Ile	Lys	Val	His	Leu	Glu	Asp	Val	Phe	Gln	Leu	Phe	Lys	Phe
		20					25						30		
Cys	Ser	Val	Leu	Trp	Thr	Tyr	Gly	Ser	Ser	Leu	Ser	Asn	Pro	Leu	Asn
		35					40						45		
Cys	Ser	Val	Lys	Thr	Val	Leu	Gln	Thr	Gln	Ala	Leu	Tyr	Val	Gly	Cys
		50					55					60			
Ala	Met	Leu	Ser	Ser	Gln	Lys	Thr	Gln	Cys	Lys	His	Gln	Leu	Ala	Ser
	65				70				75					80	
Ile	Ser	Ser	Pro	Val	Val	Thr	Ser	Leu	Leu	Ile	Asn	Leu	Gly	Ser	Pro
				85					90					95	
Val	Lys	Glu	Val	Arg	Arg	Ala	Ala	Ile	Gln	Cys	Leu	Gln	Ala	Leu	Ser
		100							105					110	

Gly Val Ala Ser Pro Phe Tyr Leu Ile Ile Asp His Leu Ile Ser Lys  
115 120 125  
Ala Glu Glu Ile Thr Ser Asp Ala Ala Tyr Val Ile Gln Asp Leu Ala  
130 135 140  
Thr Leu Phe Glu Glu Leu Gln Arg Glu Lys Lys Leu Lys Ser His Gln  
145 150 155 160  
Lys Leu Ser Glu Thr Leu Lys Asn Leu Leu Ser Cys Val Tyr Ser Cys  
165 170 175  
Pro Ser Tyr Ile Ala Lys Asp Leu Met Lys Val Leu Gln Gly Val Asn  
180 185 190  
Gly Glu Ile Thr Lys Pro Phe Phe Ala Ala Ile Ser Asp Glu Lys Val  
195 200 205  
Gln Gln Lys Leu Leu Arg Met Leu Phe Asp Leu Leu Val Asn Cys Lys  
210 215 220  
Asn Ser His Cys Ala Gln Thr Val Ser Ser Val Phe Lys Gly Ile Ser  
225 230 235 240  
Val Asn Ala Glu Gln Val Arg Ile Glu Leu Glu Pro Pro Asp Lys Ala  
245 250 255  
Lys Pro Leu Gly Thr Val Gln Gln Lys Arg Arg Gln Lys Met Gln Gln  
260 265 270  
Lys Lys Ser Gln Asp Leu Glu Ser Val Gln Glu Val Gly Gly Ser Tyr  
275 280 285  
Trp Gln Arg Val Thr Leu Ile Leu Glu Leu Leu Gln His Lys Lys Lys  
290 295 300  
Leu Arg Ser Pro Gln Ile Leu Val Pro Thr Leu Phe Asn Leu Leu Ser  
305 310 315 320  
Arg Cys Leu Glu Pro Leu Pro Gln Glu Gln Gly Asn Met Glu Tyr Thr  
325 330 335  
Lys Gln Leu Ile Leu Ser Cys Leu Leu Asn Ile Cys Gln Lys Leu Ser

340 345 350  
Pro Asp Gly Gly Lys Ile Pro Lys Asp Ile Leu Asp Glu Glu Lys Phe  
355 360 365  
Asn Val Glu Leu Ile Val Gln Cys Ile Arg Leu Ser Glu Met Pro Gln  
370 375 380  
Thr His His His Ala Leu Leu Leu Leu Gly Thr Val Ala Gly Ile Phe  
385 390 395 400  
Pro Asp Lys Val Leu His Asn Ile Met Ser Ile Phe Thr Phe Met Gly  
405 410 415  
Ala Asn Val Met Arg Leu Asp Asp Thr Tyr Ser Phe Gln Val Ile Asn  
420 425 430  
Lys Thr Val Lys Met Val Ile Pro Ala Leu Ile Gln Ser Asp Ser Gly  
435 440 445  
Asp Ser Ile Glu Val Ser Arg Asn Val Glu Glu Ile Val Val Lys Ile  
450 455 460  
Ile Ser Val Phe Val Asp Ala Leu Pro His Val Pro Glu His Arg Arg  
465 470 475 480  
Leu Pro Ile Leu Val Gln Leu Val Asp Thr Leu Gly Ala Glu Lys Phe  
485 490 495  
Leu Trp Ile Leu Leu Ile Leu Leu Phe Glu Gln Tyr Val Thr Lys Thr  
500 505 510  
Val Leu Ala Ala Ala Tyr Gly Glu Lys Asp Ala Ile Leu Glu Ala Asp  
515 520 525  
Thr Glu Phe Trp Phe Ser Val Cys Cys Glu Phe Ser Val Gln His Gln  
530 535 540  
Ile Gln Ser Leu Met Asn Ile Leu Gln Tyr Leu Leu Lys Leu Pro Glu  
545 550 555 560  
Glu Lys Glu Glu Thr Ile Pro Lys Ala Val Ser Phe Asn Lys Ser Glu  
565 570 575

Ser Gln Glu Glu Met Leu Gln Val Phe Asn Val Glu Thr His Thr Ser  
580 585 590

Lys Gln Leu Arg His Phe Lys Phe Leu Ser Val Ser Phe Met Ser Gln  
595 600 605

Leu Leu Ser Ser Asn Asn Phe Leu Lys Lys Val Val Glu Ser Gly Gly  
610 615 620

Pro Glu Ile Leu Lys Gly Leu Glu Glu Arg Leu Leu Glu Thr Val Leu  
625 630 635 640

Gly Tyr Ile Ser Ala Val Ala Gln Ser Met Glu Arg Asn Ala Asp Lys  
645 650 655

Leu Thr Val Lys Phe Trp Arg Ala Leu Leu Ser Lys Ala Tyr Asp Leu  
660 665 670

Leu Asp Lys Val Asn Ala Leu Leu Pro Thr Glu Thr Phe Ile Pro Val  
675 680 685

Ile Arg Gly Leu Val Gly Asn Pro Leu Pro Ser Val Arg Arg Lys Ala  
690 695 700

Leu Asp Leu Leu Asn Asn Lys Leu Gln Gln Asn Ile Ser Trp Lys Lys  
705 710 715 720

Thr Ile Val Thr Arg Phe Leu Lys Leu Val Pro Asp Leu Leu Ala Ile  
725 730 735

Val Gln Arg Lys Lys Lys Glu Gly Glu Glu Glu Gln Ala Ile Asn Arg  
740 745 750

Gln Thr Ala Leu Tyr Thr Leu Lys Leu Leu Cys Lys Asn Phe Gly Ala  
755 760 765

Glu Asn Pro Asp Pro Phe Val Pro Val Leu Asn Thr Ala Val Lys Leu  
770 775 780

Ile Ala Pro Glu Arg Lys Glu Glu Lys Asn Val Leu Gly Ser Ala Leu  
785 790 795 800

Leu Cys Ile Ala Glu Val Thr Ser Thr Leu Glu Ala Leu Ala Ile Pro

	805		810		815
Gln	Leu	Pro	Ser	Leu	Met
Pro	Pro	Leu	Leu	Thr	Thr
Met	Lys	Asn	Thr		
	820		825		830
Ser	Glu	Leu	Val	Ser	Ser
Glu	Val	Tyr	Leu	Leu	Ser
Ala	Leu	Ala	Ala		
	835		840		845
Leu	Gln	Lys	Val	Val	Glu
Thr	Leu	Pro	His	Phe	Ile
Ser	Pro	Tyr	Leu		
	850		855		860
Glu	Gly	Ile	Leu	Ser	Gln
Val	Ile	His	Leu	Glu	Lys
Ile	Thr	Ser	Glu		
	865		870		875
					880
Met	Gly	Ser	Ala	Ser	Gln
Ala	Asn	Ile	Arg	Leu	Thr
Ser	Leu	Lys	Lys		
	885		890		895
Thr	Leu	Ala	Thr	Thr	Leu
Ala	Pro	Arg	Val	Leu	Leu
Pro	Ala	Ile	Lys		
	900		905		910
Lys	Thr	Tyr	Lys	Gln	Ile
Glu	Lys	Asn	Trp	Lys	Asn
His	Met	Gly	Pro		
	915		920		925
Phe	Met	Gly	Ile	Leu	Gln
Glu	His	Ile	Gly	Val	Met
Lys	Lys	Glu	Glu		
	930		935		940
Leu	Thr	Ser	His	Gln	Ser
Gln	Leu	Thr	Ala	Phe	Phe
Leu	Glu	Ala	Leu		
	945		950		955
					960
Asp	Phe	Arg	Ala	Gln	His
Ser	Glu	Asn	Asp	Leu	Glu
Glu	Val	Gly	Lys		
	965		970		975
Thr	Glu	Asn	Cys	Ile	Ile
Asp	Cys	Leu	Val	Ala	Met
Val	Val	Lys	Leu		
	980		985		990
Ser	Glu	Val	Thr	Phe	Arg
Pro	Leu	Phe	Phe	Lys	Leu
Phe	Asp	Trp	Ala		
	995		1000		1005
Lys	Thr	Glu	Asp	Ala	Pro
Lys	Asp	Arg	Leu	Leu	Thr
Phe	Tyr	Asn	Leu		
	1010		1015		1020
Ala	Asp	Cys	Ile	Ala	Glu
Lys	Leu	Lys	Gly	Leu	Phe
Thr	Leu	Phe	Ala		
	1025		1030		1035
					1040

Gly His Leu Val Lys Pro Phe Ala Asp Thr Leu Asn Gln Val Asn Ile  
1045 1050 1055

Ser Lys Thr Asp Glu Ala Phe Phe Asp Ser Glu Asn Asp Pro Glu Lys  
1060 1065 1070

Cys Cys Leu Leu Leu Gln Phe Ile Leu Asn Cys Leu Tyr Lys Ile Phe  
1075 1080 1085

Leu Phe Asp Thr Gln His Phe Ile Ser Lys Glu Arg Ala Glu Ala Leu  
1090 1095 1100

Met Met Pro Leu Val Asp Gln Leu Glu Asn Arg Leu Gly Gly Glu Glu  
1105 1110 1115 1120

Lys Phe Gln Glu Arg Val Thr Lys His Leu Ile Pro Cys Ile Ala Gln  
1125 1130 1135

Phe Ser Val Ala Met Ala Asp Asp Ser Leu Trp Lys Pro Leu Asn Tyr  
1140 1145 1150

Gln Ile Leu Leu Lys Thr Arg Asp Ser Ser Pro Lys Val Arg Phe Ala  
1155 1160 1165

Ala Leu Ile Thr Val Leu Ala Leu Ala Glu Lys Leu Lys Glu Asn Tyr  
1170 1175 1180

Ile Val Leu Leu Pro Glu Ser Ile Pro Phe Leu Ala Glu Leu Met Glu  
1185 1190 1195 1200

Asp Glu Cys Glu Glu Val Glu His Gln Cys Gln Lys Thr Ile Gln Gln  
1205 1210 1215

Leu Glu Thr Val Leu Gly Glu Pro Leu Gln Ser Tyr Phe  
1220 1225

&lt;210&gt; 3562

&lt;211&gt; 104

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3562

```

Met Ser Arg Arg Arg Glu Glu Thr His Cys Trp Lys Lys Gln Pro Met
  1             5             10             15
Thr Ala Pro Leu Pro Gly Thr Arg Pro His Pro Leu Pro Ala Pro Leu
          20             25             30
Pro Gly Val Gln Pro Lys Arg Thr Tyr Val Leu Thr Pro Leu Lys Pro
          35             40             45
Leu Val Leu Ser Pro Gln Glu Thr Trp Leu Cys Val Cys Glu Trp Leu
          50             55             60
Thr Phe Leu His Pro Leu Val Leu Pro Phe Pro Ser Arg Gly Thr Glu
          65             70             75             80
Arg Gln Gly Arg Ile His Val Pro Ile Val Glu Ala Glu Lys Arg Glu
          85             90             95
Ser Val Leu Tyr Thr Val Leu Ile
          100

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<210> 3563

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3563

```

Met Leu Arg Ala Phe Leu Phe Leu Ser Leu Phe Pro His Ser Gln Val
  1             5             10             15
Leu Val Tyr Glu Leu Leu Leu Gly Lys Gly Phe Arg Gly Gly Gly Gly
          20             25             30

```



Arg Trp Lys Ala Leu Leu Gly Arg His Gln Ala Arg Leu Lys Ala Glu  
 35 40 45  
 Leu Ala Arg Leu Lys Val His Arg Gly Val Ser Arg Asn Glu Asp Leu  
 50 55 60  
 Leu Glu Val Gly Ser Arg Pro Gly Pro Ala Ser Gln Leu Pro Arg Phe  
 65 70 75 80  
 Val Arg Val Asn Thr Leu Lys Thr Cys Ser Asp Asp Val Val Asp Tyr  
 85 90 95  
 Phe Lys Arg Gln Gly Phe Ser Tyr Gln Gly Arg Ala Ser Ser Leu Asp  
 100 105 110  
 Asp Leu Arg Ala Leu Lys Gly Lys His Phe Leu Leu Asp Pro Leu Met  
 115 120 125  
 Pro Glu Leu Leu Val Phe Pro Ala Gln Thr Asp Leu His Glu His Pro  
 130 135 140  
 Leu Tyr Arg Ala Gly His Leu Ile Leu Gln Asp Arg Ala Ser Cys Leu  
 145 150 155 160  
 Pro Ala Met Leu Leu Asp Pro Pro Pro Gly Ser His Val Ile Asp Ala  
 165 170 175  
 Cys Ala Ala Pro Gly Asn Lys Thr Ser His Leu Ala Ala Leu Leu Lys  
 180 185 190  
 Asn Gln Gly Ser Leu Pro Leu Thr Trp Met Pro Ser Gly Trp His Pro  
 195 200 205  
 Trp Pro Arg Cys Trp Pro Gly Leu Ala Ser Leu Ala Val Asn Trp Leu  
 210 215 220  
 Arg Arg Thr Ser Trp Arg Ser Pro Pro Arg Ile His Ala Thr Met Arg  
 225 230 235 240  
 Ser Thr Thr Ser Cys Trp Ile Leu Pro Ala Val Ala Arg Val Cys Arg  
 245 250 255  
 Ala Asp Ser Trp Arg Ser Pro Gly Gln Ala His Leu Ala Arg Cys Val

260 265 270  
 Cys Met Pro Trp Gln Gly Ser Ser Ser Glu Pro Cys Ala Thr Arg Ser  
 275 280 285  
 Leu Ser Leu Pro Cys Ser Gly Ser Ser Thr Pro Arg Ala Pro Ser Ala  
 290 295 300  
 Arg Arg Arg Met Lys Thr Trp Cys Glu Met Arg Cys Ser Arg Thr Arg  
 305 310 315 320  
 Ala Pro Ser Gly

<210> 3564

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3564

Met Val Ser Val Arg Gly Gln Cys Pro Arg Gly Gly Phe Trp Leu Glu  
 1 5 10 15  
 Pro Ser Val Ala Glu Ala Gly Asp Leu Leu Ala Val Asn Ser Gly Val  
 20 25 30  
 Cys Arg Pro Gly Gly His Arg Gly Arg Ser Ser Ala Leu Gly Pro Leu  
 35 40 45  
 Cys Gly Ser Trp Thr Arg Ser Arg Glu Pro Gln Arg Pro Val Pro Ser  
 50 55 60  
 Pro Arg Gly Asp Leu Gly Pro Arg Pro Trp Ser Pro Leu Trp Ala Ala  
 65 70 75 80  
 Leu Arg Pro Gln Pro Arg Val Ser Pro Asp Cys Ser Val Thr Ala Gly  
 85 90 95

Gly Ser Trp Gly Asp Pro Ile Ser Val Cys Gly Val Cys Ala Phe Lys  
                   100                                  105                                  110  
 Lys Pro Leu Gly Trp Lys Pro Tyr Asp Glu Ser Thr Gly Ala Phe Pro  
                   115                                  120                                  125  
 His Leu  
                   130

<210> 3565

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3565

Met Ser Leu Thr Phe Arg Arg Pro Lys Thr Leu Arg Leu Arg Arg Gln  
       1                                  5                                  10                                  15  
 Pro Arg Tyr Pro Arg Lys Ser Thr Pro Thr Arg Asn Lys Leu Gly His  
                   20                                  25                                  30  
 Tyr Ala Ile Ile Lys Phe Pro Leu Ala Thr Glu Ser Ala Val Lys Lys  
                   35                                  40                                  45  
 Ile Glu Glu Asn Asn Thr Leu Val Phe Thr Val Asp Val Lys Asp Asn  
                   50                                  55                                  60  
 Lys His Gln Ile Arg Gln Ala Val Lys Lys Val Tyr Asp Ser Asp Val  
       65                                  70                                  75                                  80  
 Ala Lys Val Thr Thr Leu Ile Cys Pro Asp Lys Glu Lys Lys Ala Tyr  
                   85                                  90                                  95  
 Val Arg Leu Ala Pro Asp Tyr Asp Ala Phe Asp Val Val Thr Lys Leu  
                   100                                  105                                  110  
 Gly Ser Pro Lys Leu Ser Pro Ala Gly

115

120

&lt;210&gt; 3566

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3566

Met Gly Trp Gly Ser Arg Leu His His Met Ala Gly Ala Gln Ala Arg

1

5

10

15

Arg Gly Ser Gly Trp Gly Ser Met Trp Gly Ala Trp Leu Trp Asp Pro

20

25

30

Gly Gly Pro Gly Pro Cys Arg Pro Ala Val Gln Val Ser Ser Ala Asp

35

40

45

Ala Arg Leu Met Val Phe Asp Lys Thr Glu Gly Thr Trp Arg Leu Leu

50

55

60

Cys Ser Ser Arg Ser Asn Ala Arg Val Ala Gly Leu Ser Cys Glu Glu

65

70

75

80

Met Gly Phe Leu Arg Tyr Trp Gly Pro Ser Glu Gly Trp Glu Pro Gly

85

90

95

Gly Ala Gly Glu Gln Ala

100

&lt;210&gt; 3567

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3567

Met Trp Ser Ala Ala Ser Thr Pro Pro Gly Thr Ala Ala Ser Ser Pro  
 1 5 10 15  
 Thr Thr Gln His Pro Gly Lys Trp Ser Arg Ser Trp Trp Pro Leu Gly  
 20 25 30  
 Ser Arg Pro Leu Ala Ser Val Pro Ser Thr Thr Trp Ala Pro Thr Pro  
 35 40 45  
 Ser Ala Ser Pro Ser Ser Ser Cys Ser Gly Ser Gln Gly Ser Arg Gly  
 50 55 60  
 His Gly Arg Gly His Leu Glu Gly Glu Val Leu Pro Ser Met Gly Val  
 65 70 75 80  
 Val Ser Leu Cys Thr Pro Asn Gln Glu Pro Asp Ala Glu Ser Gln Gly  
 85 90 95  
 Lys Gln Gly Pro Leu Lys Ser Arg Asn Leu Leu Gly Pro Pro Ser Gly  
 100 105 110  
 Leu Pro Trp Gly Leu Gln Asp His Trp Gly Ser Thr Val Ser Gly Trp  
 115 120 125  
 Leu Gln Leu Leu Ser Tyr Trp Tyr Cys Cys Ala Arg Gly Glu Gly Met  
 130 135 140  
 Arg Gly Ser Ala Arg Lys Glu Arg Arg Val Ser Ser Ser Asp Thr Ala  
 145 150 155 160  
 Val Cys Ser Glu Lys Thr Pro Val Pro Arg Ile Val Glu Ile Glu Val  
 165 170 175  
 Gly Arg Glu Glu Val Arg Glu Arg Arg Leu Trp Pro Gln Gly Gln Leu  
 180 185 190  
 Thr Thr Asn Pro Leu Pro Thr Gln Ala Leu Ser  
 195 200

&lt;210&gt; 3568

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3568

Met Asn Leu Lys Arg Tyr Phe Glu Gln Lys His Arg Thr Glu Ala Ser

1 5 10 15

Val Pro Ala Pro Gln Ala Ala Cys Val Pro Gly Tyr Pro Val Pro Ser

20 25 30

Asp Pro Gly Glu Ala Gly Leu Ser Cys Thr Gly Ser Ser Gly Thr Gly

35 40 45

Tyr Cys Ala Ser Gln Phe Ser Val Ile Ser His Leu Arg Thr Ile Phe

50 55 60

Leu Pro Glu Leu Arg Pro Leu Pro Arg Leu Ser Leu Glu Asp Thr Asn

65 70 75 80

Asn Glu Asp Thr Asn Asn Glu His Leu Leu Gly Ser Pro Glu Asp Pro

85 90 95

His Met Glu Ala Ala Gln Pro Ser Pro Tyr Pro Glu Ala His Arg Leu

100 105 110

His Lys Pro Arg Pro Gly Pro Ser Leu Met Ala His Arg Gln Val Leu

115 120 125

Arg Thr Pro Thr Ala Leu Leu

130 135

&lt;210&gt; 3569

&lt;211&gt; 534

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3569

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Met Ser Leu Leu Arg Asp Ser Arg Asn Tyr Ser Gln Glu Thr Val Pro
  1             5             10             15
Lys Ala Asn Phe Gly Phe Ser Gly Ile Ser Pro Leu Glu Asp Glu Ile
      20             25             30
Asn Lys Gly Ser Lys Ile Ser Gly Leu Gln Tyr Ser Ile Pro Asp Thr
      35             40             45
Glu Asn Gln Thr Leu Asn Tyr Gly Lys Thr Lys Glu Met Glu Lys Gln
      50             55             60
Asn Thr Asp Lys Cys His Val Ser Ser His Thr Arg Leu Thr Glu Ser
      65             70             75             80
Ser Val His Asp Phe Lys Thr Glu Asp Gln Glu Val Ile Thr Thr Asp
      85             90             95
Phe Gly Gln Val Val Leu Arg Pro Lys Glu Ala Arg His Ala Asn Val
      100            105            110
Asn Pro Asn Glu Asp Gly Glu Ser Ser Ser Ser Ser Pro Thr Glu Glu
      115            120            125
Asn Ala Ala Thr Asp Asn Ile Ala Phe Met Ile Thr Glu Thr Thr Val
      130            135            140
Gln Val Leu Ser Ser Gly Glu Val His Asp Ile Val Ser Gln Lys Gly
      145            150            155            160
Glu Asp Ile Gln Thr Val Asn Ile Asp Ala Arg Lys Glu Met Thr Pro
      165            170            175
Arg Gln Glu Gly Thr Asp Asn Glu Asp Pro Val Val Cys Leu Asp Lys
      180            185            190
Lys Pro Val Ile Ile Ile Phe Asp Glu Pro Met Asp Ile Arg Ser Ala

```

195	200	205
Tyr Lys Arg Leu Ser Thr Ile Phe Glu Glu Cys Asp Glu Glu Leu Glu		
210	215	220
Arg Met Met Met Glu Glu Lys Ile Glu Glu Glu Glu Glu Glu Glu Asn		
225	230	235
Gly Asp Ser Val Val Gln Asn Asn Asn Thr Ser Gln Met Ser His Lys		
245	250	255
Lys Val Ala Pro Gly Asn Leu Arg Thr Gly Gln Gln Val Glu Thr Lys		
260	265	270
Ser Gln Pro His Ser Leu Ala Thr Glu Thr Arg Asn Pro Gly Gly Gln		
275	280	285
Glu Met Asn Arg Thr Glu Leu Asn Lys Phe Ser His Val Asp Ser Pro		
290	295	300
Asn Ser Glu Cys Lys Gly Glu Asp Ala Thr Asp Asp Gln Phe Glu Ser		
305	310	315
Pro Lys Lys Lys Phe Lys Phe Lys Phe Pro Lys Lys Gln Leu Ala Ala		
325	330	335
Leu Thr Gln Ala Ile Arg Thr Gly Thr Lys Thr Gly Lys Lys Thr Leu		
340	345	350
Gln Val Val Val Tyr Glu Glu Glu Glu Glu Asp Gly Thr Leu Lys Gln		
355	360	365
His Lys Glu Ala Lys Arg Phe Glu Ile Ala Arg Ser Gln Pro Glu Asp		
370	375	380
Thr Pro Glu Asn Thr Val Arg Arg Gln Glu Gln Pro Ser Ile Glu Ser		
385	390	395
Thr Ser Pro Ile Ser Arg Thr Asp Glu Ile Arg Lys Asn Thr Tyr Arg		
405	410	415
Thr Leu Asp Ser Leu Glu Gln Thr Ile Lys Gln Leu Glu Asn Thr Ile		
420	425	430



Ser Glu Met Ser Pro Lys Ala Leu Val Asp Thr Ser Cys Ser Ser Asn

435

440

445

Arg Asp Ser Val Ala Ser Ser Ser His Ile Ala Gln Glu Ala Ser Pro

450

455

460

Arg Pro Leu Leu Val Pro Asp Glu Gly Pro Thr Ala Leu Glu Pro Pro

465

470

475

480

Thr Ser Ile Pro Ser Ala Ser Arg Lys Gly Ser Ser Gly Ala Pro Gln

485

490

495

Thr Ser Arg Met Pro Val Pro Met Ser Ala Lys Asn Arg Pro Gly Thr

500

505

510

Leu Asp Lys Pro Gly Lys Gln Ser Lys Leu Gln Asp Pro Arg Gln Tyr

515

520

525

Arg Gln Val Val Leu Pro

530

<210> 3570

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3570

Met Ala Pro Glu Asp Pro Ala Ser Leu Arg His Gly Leu Trp His Gln

1

5

10

15

Arg Thr Gln Pro Leu Ala Pro Trp Thr Met Ala Ala Glu Asp Pro Ala

20

25

30

Pro Arg Ile Leu Asp Tyr Gly Ser Arg Gly Pro Ser Leu Pro Ala Ser

35

40

45

Trp Thr Lys Ala Pro Glu Asp Pro Ala Pro Ser Gly Pro Gly Leu Trp

50                      55                      60  
 Gln Gln Arg Thr Gln Pro Leu Ala Ser Trp Thr Met Ala Pro Glu Asp  
 65                      70                      75                      80  
 Pro Ala Ser Leu Arg His Gly Leu Trp His Gln Arg Thr Gln Pro Leu  
                     85                      90                      95  
 Ala Pro Trp Thr Met Ala Ala Glu Asp Pro Ala Pro Trp Arg Pro Gly  
                     100                      105                      110  
 Leu Arg His Ser Arg Thr Pro Gln His Arg Val Leu Leu His Arg Arg  
                     115                      120                      125  
 Thr Leu Ala Gly Leu Arg Pro Gly Leu Ser Tyr  
                     130                      135

<210> 3571

<211> 345

<212> PRT

<213> Homo sapiens

<400> 3571

Met Asp Gly Glu Gln Leu Glu Gly Ala Ser Ser Glu Lys Arg Glu Arg  
 1                      5                      10                      15  
 Glu Ala Ala Glu Glu Gly Leu Ala Ser Val Lys Arg Pro Arg Arg Glu  
                     20                      25                      30  
 Ala Leu Ser Asn Asp Thr Thr Glu Ser Leu Ala Ala Asn Ser Arg Gly  
                     35                      40                      45  
 Arg Glu Lys Pro Arg Pro Leu His Ala Leu Ala Ala Gly Phe Ser Pro  
                     50                      55                      60  
 Pro Val Asn Val Thr Val Ser Pro Arg Ser Glu Glu Ser His Thr Thr  
 65                      70                      75                      80

Thr Val Ser Gly Gly Asn Gly Ser Val Phe Gln Ala Gly Pro Gln Leu  
                             85                            90                            95  
 Gln Ala Leu Ala Asn Leu Glu Ala Arg Arg Gly Ser Ile Gly Ala Ala  
                             100                            105                            110  
 Leu Ser Ser Arg Asp Val Ser Gly Leu Pro Val Tyr Ala Gln Ser Gly  
                             115                            120                            125  
 Glu Pro Arg Arg Leu Thr Gln Ala Gln Val Ala Ala Phe Pro Gly Glu  
                             130                            135                            140  
 Asn Ala Leu Glu His Ser Ser Asp Gln Asp Thr Trp Asp Ser Leu Arg  
 145                            150                            155                            160  
 Ser Pro Gly Phe Cys Ser Pro Leu Ser Ser Gly Gly Gly Ala Glu Ser  
                             165                            170                            175  
 Leu Pro Pro Gly Gly Pro Gly His Ala Glu Ala Gly His Leu Gly Lys  
                             180                            185                            190  
 Val Cys Asp Phe His Leu Asn His Gln Gln Pro Ser Pro Thr Ser Val  
                             195                            200                            205  
 Leu Pro Thr Glu Val Ala Ala Pro Pro Leu Glu Lys Ile Leu Ser Val  
                             210                            215                            220  
 Asp Ser Val Ala Val Asp Cys Ala Tyr Arg Thr Val Pro Lys Pro Gly  
 225                            230                            235                            240  
 Pro Gln Pro Gly Pro His Gly Ser Leu Leu Thr Glu Gly Cys Leu Arg  
                             245                            250                            255  
 Ser Leu Ser Gly Asp Leu Asn Arg Phe Pro Cys Gly Met Glu Val His  
                             260                            265                            270  
 Ser Gly Gln Arg Glu Leu Glu Ser Val Val Ala Val Gly Glu Ala Met  
                             275                            280                            285  
 Ala Phe Glu Ile Ser Asn Gly Ser His Glu Leu Leu Ser Gln Gly Gln  
                             290                            295                            300  
 Lys Gln Ile Phe Ile Gln Thr Ser Asp Gly Leu Ile Leu Ser Pro Pro

305                      310                      315                      320  
Gly Thr Ile Val Ser Gln Glu Glu Asp Ile Val Thr Val Thr Asp Ala  
                         325                      330                      335  
Glu Gly Arg Ala Cys Gly Trp Ala Arg  
                         340                      345

<210> 3572

<211> 484

<212> PRT

<213> Homo sapiens

<400> 3572

Met Glu Ala Glu Glu Ala Gln Arg Gly Ala Ser Pro Pro Ile Ser Ala  
1                      5                      10                      15  
Ile Glu Glu Phe Ser Ile Ile Pro Glu Ala Pro Met Arg Ser Ser Gln  
                         20                      25                      30  
Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr  
                         35                      40                      45  
Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu  
                         50                      55                      60  
Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys  
65                      70                      75                      80  
Glu Gly Ser Ala Asp Val Glu Pro Asn Gln Glu Ser Leu Val Ala Glu  
                         85                      90                      95  
Ala Cys Asp Thr Pro Glu His Trp Glu Ala Val Pro Gln Ser Leu Ala  
                         100                      105                      110  
Gly Arg Gln Ala Arg Thr Leu Ala Pro Pro Glu Leu Trp Ala Cys Pro  
                         115                      120                      125

Ile Gln Ser Glu His Leu Asp Met Ala Pro Phe Ser Ser Asp Leu Gly  
130 135 140  
Ser Glu Glu Glu Glu Val Glu Phe Trp Pro Gly Leu Thr Ser Leu Thr  
145 150 155 160  
Leu Gly Ser Gly Gln Ala Glu Glu Glu Glu Glu Thr Ser Ser Asp Asn  
165 170 175  
Ser Gly Gln Thr Arg Tyr Tyr Ser Pro Cys Glu Glu His Pro Ala Glu  
180 185 190  
Thr Asn Gln Asn Glu Gly Ala Glu Ser Gly Thr Ile Arg Gln Gly Glu  
195 200 205  
Glu Leu Pro Ser Glu Glu Leu Gln Glu Ser Gln Gly Leu Leu His Pro  
210 215 220  
Gln Glu Val Gln Val Leu Glu Glu Gln Gly Gln Gln Glu Ala Gly Phe  
225 230 235 240  
Arg Gly Glu Gly Thr Leu Arg Glu Asp Val Cys Ala Asp Gly Leu Leu  
245 250 255  
Gly Glu Glu Gln Met Ile Glu Gln Val Asn Asp Glu Lys Gly Glu Gln  
260 265 270  
Lys Gln Lys Gln Glu Gln Val Gln Asp Val Met Leu Gly Arg Gln Gly  
275 280 285  
Glu Arg Met Gly Leu Thr Gly Glu Pro Glu Gly Leu Asn Asp Gly Glu  
290 295 300  
Trp Glu Gln Glu Asp Met Glu Arg Lys Ala Gln Gly Gln Gly Gly Pro  
305 310 315 320  
Glu Gln Gly Glu Glu Arg Lys Arg Glu Leu Gln Val Pro Glu Glu Asn  
325 330 335  
Arg Ala Asp Ser Gln Asp Glu Lys Ser Gln Thr Phe Leu Gly Lys Ser  
340 345 350  
Glu Glu Val Thr Gly Lys Gln Glu Asp His Gly Ile Lys Glu Lys Gly

355                      360                      365  
 Val Pro Val Ser Gly Gln Glu Ala Lys Glu Pro Glu Ser Trp Asp Gly  
 370                      375                      380  
 Gly Arg Leu Gly Ala Val Gly Arg Ala Arg Ser Arg Glu Glu Glu Asn  
 385                      390                      395                      400  
 Glu His His Gly Pro Ser Met Pro Ala Leu Ile Ala Pro Glu Asp Ser  
                          405                      410                      415  
 Pro His Cys Asp Leu Phe Pro Gly Ala Ser Tyr Leu Val Thr Gln Ile  
                          420                      425                      430  
 Pro Gly Thr Gln Thr Glu Ser Arg Ala Glu Glu Leu Ser Pro Ala Ala  
                          435                      440                      445  
 Leu Ser Pro Leu Leu Glu Pro Ile Arg Cys Ser His Gln Pro Ile Ser  
                          450                      455                      460  
 Leu Leu Gly Ser Phe Leu Thr Glu Glu Ser Pro Asp Lys Glu Lys Leu  
 465                      470                      475                      480  
 Leu Ser Val Leu

&lt;210&gt; 3573

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3573

Met Pro Ser Ser Pro Thr Trp Ala Leu Ile Leu His Ile Arg Leu Pro  
 1                      5                      10                      15  
 Thr Leu Thr Pro Pro Ile Gly Pro Pro Gln Pro Cys Thr Tyr Ser Pro  
                          20                      25                      30

His Gly Cys Gln Pro His Pro Ala His Ala Glu Ser Pro Cys Cys Gly  
                   35                                  40                                  45  
 Val Pro Pro His Gly Gln Leu His Thr Leu Leu Gly Leu Thr Pro Ala  
                   50                                  55                                  60  
 Leu Pro Thr Ser Thr Pro Ser Leu Pro Cys Thr Gly Pro Pro Pro Arg  
                   65                                  70                                  75                                  80  
 Val Asp Val Leu Cys Gly Arg Gln Ser Gly Ala Pro Lys Asp Gly His  
                                   85                                  90                                  95  
 Thr Leu Ser Pro Gly Thr Cys Glu Cys Tyr Met Ala Lys Gly Thr Leu  
                                   100                                  105                                  110  
 Gln Ile Lys Ile Lys Ile Val Asn Phe Lys Thr Gly Lys Leu Ser Trp  
                                   115                                  120                                  125  
 Ile Ile Cys Met Gly Pro Met Gln Ser Gln Gly Ser Ile Arg Ile Glu  
                                   130                                  135                                  140  
 Lys Ala Gly Arg Lys Lys Gly Arg Trp Glu Arg Gly Thr Gly Pro Ala  
                   145                                  150                                  155                                  160  
 Ala Ala Gly Gly Lys  
                                   165

<210> 3574

<211> 275

<212> PRT

<213> Homo sapiens

<400> 3574

Met Ser Thr Ile Gly Ser Phe Glu Gly Phe Gln Ala Val Ser Leu Lys  
           1                                  5                                  10                                  15  
 Gln Glu Gly Asp Asp Gln Pro Ser Glu Thr Asp His Leu Ser Met Glu

20	25	30
Glu Glu Asp Pro Met Pro Arg Gln Ile Ser Arg Gln Ser Ser Val Thr		
35	40	45
Glu Ser Thr Leu Tyr Pro Asn Pro Tyr His Gln Pro Tyr Ile Ser Arg		
50	55	60
Lys Tyr Phe Ala Thr Arg Pro Gly Ala Ile Glu Thr Ala Met Glu Asp		
65	70	75
80		
Leu Lys Gly His Val Ala Glu Thr Ser Gly Glu Thr Ile Gln Gly Phe		
85	90	95
Trp Leu Leu Thr Lys Ile Asp His Trp Asn Asn Glu Lys Glu Arg Ile		
100	105	110
Leu Leu Val Thr Asp Lys Thr Leu Leu Ile Cys Lys Tyr Asp Phe Ile		
115	120	125
Met Leu Ser Cys Val Gln Leu Gln Arg Ile Pro Leu Ser Ala Val Tyr		
130	135	140
Arg Ile Cys Leu Gly Lys Phe Thr Phe Pro Gly Met Ser Leu Asp Lys		
145	150	155
160		
Arg Gln Gly Glu Gly Leu Arg Ile Tyr Trp Gly Ser Pro Glu Glu Gln		
165	170	175
Ser Leu Leu Ser Arg Trp Asn Pro Trp Ser Thr Glu Val Pro Tyr Ala		
180	185	190
Thr Phe Thr Glu His Pro Met Lys Tyr Thr Ser Glu Lys Phe Leu Glu		
195	200	205
Ile Cys Lys Leu Ser Gly Phe Met Ser Lys Leu Val Pro Ala Ile Gln		
210	215	220
Asn Ala His Lys Asn Ser Thr Gly Ser Gly Arg Gly Lys Lys Leu Met		
225	230	235
240		
Val Leu Thr Glu Pro Ile Leu Ile Glu Thr Tyr Thr Gly Leu Met Ser		
245	250	255



Phe Ile Gly Asn Arg Asn Lys Leu Gly Tyr Ser Leu Ala Arg Gly Ser  
                                 260                                265                                270

Ile Gly Phe  
                                 275

<210> 3575

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3575

Met Gln Pro Val Ile Ser Ala Leu Asn Ile Gln Thr Gln Thr Val Gln  
     1                                5                                10                                15  
 Thr His Pro Ala Pro Arg Asn Thr Ser Glu His Cys Thr Leu Pro Ala  
                                 20                                25                                30  
 Cys Asp Ala Gln Glu Glu His Arg Asp Thr Val Asp Gly Ser Ile Ala  
                                 35                                40                                45  
 Arg Thr Glu Ser Ala Ser Gly Glu Ile Trp Arg Gln Thr His Met Asp  
                                 50                                55                                60  
 Gly Glu His His Val Asn Thr Lys Ala Glu Ile Ser Val Met Ser Ala  
     65                                70                                75                                80  
 Asn Gln Gly Ala Pro Arg Ile Thr Ser Lys Pro Pro Glu Ala Arg Arg  
                                 85                                90                                95  
 Glu Ala Arg Asp Arg Ser Leu Pro Ser Ala Phe Ser Leu Arg Gly Leu  
                                 100                                105                                110  
 Thr Asp Thr Leu Ile Leu Gly Phe Cys Pro Pro Glu Leu  
                                 115                                120                                125

&lt;210&gt; 3576

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3576

Met Ser Leu Met Thr Arg Glu Asn Leu Ala Phe Arg Gly Ser Leu Met

1 5 10 15

Gly Cys Ser Glu Leu Lys Pro Phe Gln Glu Leu Thr His Gln Ser Ala

20 25 30

Val Ser His Ser Arg Ala Asp Val Ala Asp Val Trp Trp Tyr Cys Gly

35 40 45

Gly Pro Leu Leu Asp Thr Leu Pro Ser Asn Trp Ser Gly Thr Cys Thr

50 55 60

Leu Val Gln Phe Ala Ile Pro Phe Ala Leu Ala Phe Leu Gln Pro Glu

65 70 75 80

Lys Glu Lys Pro Gln His Arg Lys Ile Arg Glu Ala Pro Tyr Gly Ser

85 90 95

Phe Asp Ser Gln Val Tyr Leu Asp Ala Thr Gly Val Pro Gln Gly Val

100 105 110

Pro His Lys Phe Lys Ala Gln Asp Gln Ile Ala Ala Gly Phe Glu Ser

115 120 125

Ile Phe Trp Trp Val Thr Ile Ser Lys Asn Ile Asp Trp Ile Asn Tyr

130 135 140

Ile Tyr Tyr Asn Gln Gln Arg Phe Ile Asn Tyr Thr Arg Asp Ala Val

145 150 155 160

Lys Gly Ile Ala Glu Gln Leu Gly Pro Thr Ser Gln Met Ala Trp Glu

165 170 175

Asn Arg Met Ala Leu Asp Met Ile Leu Ala Lys Lys Gly Gly Val Cys  
180 185 190  
Val Met Ile Lys Thr Gln Cys Cys Thr Phe Ile Pro Asn Asn Thr Ala  
195 200 205  
Pro Ser Gly Ser Ile Thr Arg Ala Leu Gln Gly Leu Thr Ala Leu Ser  
210 215 220  
Asn Glu Leu Ala Lys Asn Ser Gly Val Asn Asp Pro Phe Ser Gly Trp  
225 230 235 240  
Leu Glu Arg Trp Phe Gly Lys Trp Lys Gly Ile Ile Ala Ser Ile Leu  
245 250 255  
Thr Ser Leu Ala Ala Val Ile Gly Val Val Ile Leu Phe Gly Cys Cys  
260 265 270  
Val Thr Pro Cys Ile Arg Gly Leu Val Gln Arg Leu Ile Glu Thr Val  
275 280 285  
Leu Thr Lys Thr Ser Leu Ser Ser Pro Pro Pro Tyr Ser Asp Lys Leu  
290 295 300  
Phe Leu Leu Glu Asp Gln Val Glu Gln Gln Ser Gln Asp Leu Leu Lys  
305 310 315 320  
Arg Phe Glu Glu Glu Gly Pro  
325

&lt;210&gt; 3577

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3577

Met Leu Val Leu Thr Ser Ala Ile Pro Gln Ala Lys His Ser Phe Tyr

1	5	10	15												
Gln	Ala	His	Cys	Leu	Ala	Gly	Gly	Arg	Lys	Phe	His	Arg	Leu	Ser	Leu
	20					25				30					
Gly	Ser	Phe	Cys	Arg	Asn	Asn	Pro	Tyr	Ser	Ser	Gly	Gln	Gly	Ala	Asn
	35					40					45				
Val	Ser	Ile	Gln	Leu	Ala	Ala	Lys	Asn	Val	Tyr	Pro	Asn	Lys	Gln	Gly
	50					55					60				
Arg	Pro	Thr	Asp	Pro	Leu	Asp	Pro	Leu	Glu	Met	Asp	Leu	Gly	His	Ser
	65				70					75				80	
Ala	Phe	His	Asp	Phe	Ser	Lys	Gln	Arg	Gly	Val	Val	Ile	Leu	Ser	Lys
			85						90					95	
Ser	Trp	Arg	Gln	Cys	Gln	Cys	Pro	Ala	Thr	His	His	Val	Pro	Val	Leu
		100						105					110		
Glu	Lys	Pro	Leu	Cys	Thr	Pro	Leu	Cys	Trp						
	115						120								

&lt;210&gt; 3578

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3578

Met	Leu	His	Gly	Leu	Gly	Pro	Val	Pro	Pro	Pro	Leu	Trp	Ala	Ala	Val
1		5						10					15		
Ser	Ala	Ser	Arg	Trp	Gly	Gly	Gly	Gly	Pro	Gln	Pro	Leu	Pro	Gln	Val
		20						25					30		
Ser	Lys	Glu	Gly	Ser	Gly	Leu	Ala	Arg	Pro	Asp	Pro	Ser	Cys	Cys	Val
		35					40					45			

Arg Ala Gly Leu Gly Ala Ala Lys Thr Pro Gly Ala Gln Gly Glu Arg  
 50 55 60  
 Leu Gly Pro Arg Gly Thr Arg Arg Ala Arg Gly Leu Gln Leu Arg Pro  
 65 70 75 80  
 Val Gly Gly Gln Ser Arg Arg Glu Ala Ala Pro Ala Cys Ser Gly Pro  
 85 90 95  
 Gln Pro Cys Arg Pro His Gly Thr Gly Ala Ala Ser Ser Leu Gly Leu  
 100 105 110  
 Gln Asp Ala Asp  
 115

<210> 3579

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3579

Met Leu Gln Ser Glu Ile Gln Ala Met Lys Lys Leu Arg His Lys His  
 1 5 10 15  
 Ile Leu Ala Leu Tyr Ala Val Val Ser Val Gly Asp Pro Val Tyr Ile  
 20 25 30  
 Ile Thr Glu Leu Met Ala Lys Gly Ser Leu Leu Glu Leu Leu Arg Asp  
 35 40 45  
 Ser Asp Glu Lys Val Leu Pro Val Ser Glu Leu Leu Asp Ile Ala Trp  
 50 55 60  
 Gln Val Ala Glu Gly Met Cys Tyr Leu Glu Ser Gln Asn Tyr Ile His  
 65 70 75 80  
 Arg Asp Leu Ala Ala Arg Asn Ile Leu Val Gly Glu Asn Thr Leu Cys

85 90 95  
 Lys Val Gly Asp Phe Gly Leu Ala Arg Leu Ile Lys Glu Asp Val Tyr  
 100 105 110  
 Leu Ser His Asp His Asn Ile Pro Tyr Lys Trp Thr Ala Pro Glu Ala  
 115 120 125  
 Leu Ser Arg Gly His Tyr Ser Thr Lys Ser Asp Val Trp Ser Phe Gly  
 130 135 140  
 Ile Leu Leu His Glu Met Phe Ser Arg Gly Gln Val Pro Tyr Pro Gly  
 145 150 155 160  
 Thr Val Pro Thr Val Pro Asp Trp Ala  
 165

&lt;210&gt; 3580

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3580

Met Pro Ile Ala Ala Phe Gly Gln Lys Gln Arg Pro Ser Arg Phe Phe  
 1 5 10 15  
 Met Thr Pro Pro Arg Leu His Tyr Thr Pro Pro Leu Gln Ser Pro Ile  
 20 25 30  
 Ile Asp Asn Asp Pro Leu Leu Gly Gln Ser Pro Trp Arg Ser Lys Ile  
 35 40 45  
 Ser Gly Ser Asp Thr Glu Thr Leu Gly Gly Phe Pro Val Glu Phe Leu  
 50 55 60  
 Ile Gln Val Thr Arg Leu Ser Lys Ile Leu Met Ile Lys Lys Glu His  
 65 70 75 80

Ile Lys Lys Leu Arg Glu Met Asn Thr Glu Ala Glu Lys Leu Lys Ser  
85 90 95  
Tyr Ser Met Pro Ile Ser Ile Glu Phe Gln Arg Arg Tyr Ala Thr Ile  
100 105 110  
Val Leu Glu Leu Glu Gln Leu Asn Lys Asp Leu Asn Lys Val Leu His  
115 120 125  
Lys Val Gln Gln Tyr Cys Tyr Glu Leu Ala Pro Asp Gln Gly Leu Gln  
130 135 140  
Pro Ala Asp Gln Pro Thr Asp Met Arg Arg Arg Cys Glu Glu Glu Ala  
145 150 155 160  
Gln Glu Ile Val Arg His Ala Asn Ser Ser Thr Gly Gln Pro Cys Val  
165 170 175  
Glu Asn Glu Asn Leu Thr Asp Leu Ile Ser Arg Leu Thr Ala Ile Leu  
180 185 190  
Leu Gln Ile Lys Cys Leu Ala Glu Gly Gly Asp Leu Asn Ser Phe Glu  
195 200 205  
Phe Lys Ser Leu Thr Asp Ser Leu Asn Asp Ile Lys Ser Thr Ile Asp  
210 215 220  
Ala Ser Asn Ile Ser Cys Phe Gln Asn Asn Val Glu Ile His Val Ala  
225 230 235 240  
His Ile Gln Ser Gly Leu Ser Gln Met Gly Asn Leu His Ala Phe Ala  
245 250 255  
Ala Asn Asn Thr Asn Arg Asp  
260

&lt;210&gt; 3581

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3581

Met	Ala	Glu	Asn	Asn	Glu	Asn	Ile	Ser	Lys	Asn	Val	Asp	Val	Arg	Pro
1				5					10					15	
Lys	Thr	Ser	Arg	Ser	Arg	Ser	Ala	Asp	Arg	Lys	Asp	Gly	Tyr	Val	Trp
			20					25					30		
Ser	Gly	Lys	Glu	Leu	Ser	Trp	Ser	Lys	Lys	Ser	Glu	Ser	Tyr	Ser	Asp
		35					40				45				
Ala	Glu	Thr	Val	Asn	Gly	Ile	Glu	Lys	Thr	Glu	Val	Ser	Leu	Arg	Asn
	50					55					60				
Gln	Glu	Arg	Lys	His	Ser	Cys	Ser	Ser	Ile	Glu	Leu	Asp	Leu	Asp	His
65				70					75					80	
Ser	Cys	Gly	His	Arg	Phe	Leu	Gly	Arg	Ser	Leu	Lys	Gln	Lys	Leu	Gln
			85					90					95		
Asp	Ala	Val	Gly	Gln	Cys	Phe	Pro	Ile	Lys	Asn	Cys	Ser	Ser	Arg	His
		100						105					110		
Ser	Ser	Gly	Leu	Pro	Ser	Lys	Arg	Lys	Ile	His	Ile	Ser	Glu	Leu	Met
		115					120					125			
Leu	Asp	Lys	Cys	Pro	Phe	Pro	Pro	Arg	Ser	Asp	Leu	Ala	Phe	Arg	Trp
130					135						140				
His	Phe	Ile	Lys	Arg	His	Thr	Ala	Pro	Ile	Asn	Ser	Lys	Ser	Asp	Glu
145				150					155					160	
Trp	Val	Ser	Thr	Asp	Leu	Ser	Gln	Thr	Glu	Leu	Arg	Asp	Gly	Gln	Leu
			165					170					175		
Lys	Arg	Arg	Asn	Met	Glu	Glu	Asn	Ile	Asn	Cys	Phe	Ser	His	Thr	Asn
		180						185					190		
Val	Gln	Pro	Cys	Val	Ile	Thr	Thr	Asp	Asn	Ala	Leu	Cys	Arg	Glu	Gly
		195					200						205		



Pro Met Thr Gly Ser Val Met Asn Leu Val Ser Asn Asn Ser Ile Glu  
 210 215 220  
 Asp Ser Asp Met Asp Ser Asp Asp Glu Ile Leu Thr Leu Cys Thr Ser  
 225 230 235 240  
 Ser Arg Lys Arg Asn Lys Pro Lys Trp Asp Leu Asp Asp Glu Ile Leu  
 245 250 255  
 Gln Leu Glu Thr Pro Pro Lys Tyr His Thr Gln Ile Asp Tyr Val His  
 260 265 270  
 Cys Leu Val Pro Asp Leu Leu Gln Ile Asn Asn Asn Pro Cys Tyr Trp  
 275 280 285  
 Gly Val Met Asp Lys Tyr Ala Ala Glu Ala Leu Leu Glu Gly Lys Pro  
 290 295 300  
 Glu Gly Thr Phe Leu Leu Arg Asp Ser Ala Gln Glu Asp Tyr Leu Phe  
 305 310 315 320  
 Ser Val Ser Phe Arg Arg Tyr Ser Arg Ser Leu His Ala Arg Ile Glu  
 325 330 335  
 Gln Trp Asn His Asn Phe Ser Phe Asp Ala His Asp Pro Cys Val Phe  
 340 345 350  
 His Ser Pro Asp Ile Thr Gly Leu Leu Glu His Tyr Lys Asp Pro Ser  
 355 360 365  
 Ala Cys Met Phe Phe Glu Pro Leu Leu Ser Thr Pro Leu Ile Arg Thr  
 370 375 380  
 Phe Pro Phe Ser Leu Gln His Ile Cys Arg Thr Val Ile Cys Asn Cys  
 385 390 395 400  
 Thr Thr Tyr Asp Gly Ile Asp Ala Leu Pro Ile Pro Ser Ser Met Lys  
 405 410 415  
 Leu Tyr Leu Lys Glu Tyr His Tyr Lys Ser Lys Val Arg Val Leu Arg  
 420 425 430  
 Ile Asp Ala Pro Glu Gln Gln Cys

435

440

&lt;210&gt; 3582

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3582

Met Phe Leu Val Thr Asn Ser Ile Trp Pro Asp Phe Lys Val Ser His

1 5 10 15

Pro Ser Phe Cys Gln Leu Gly Ile Cys Val Asn Val Leu Ile Leu Met

20 25 30

Lys Trp Ser Phe Leu Ser Gln Leu Ile Phe Leu Val Ile Asp Ser Ile

35 40 45

Cys Leu Leu Leu Lys Leu Val Thr Ser Phe Cys Leu Leu Asp Ile Tyr

50 55 60

Met Val Cys His Pro Phe Ser Leu Asn Lys Ser Arg Ser Leu Cys Phe

65 70 75 80

Lys Val His Phe Leu Gln Lys Ala Tyr Arg His Phe Phe Ile Leu Ser

85 90 95

Leu Asn Pro Cys Met Arg Asn Ser Val

100 105

&lt;210&gt; 3583

&lt;211&gt; 301

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3583

Met	Cys	Val	Trp	Arg	Leu	Ile	Leu	Asp	Ala	Val	Asp	Gly	Arg	Glu	Cys
1				5					10					15	
His	His	Leu	Val	His	Cys	Tyr	Met	Pro	Gln	Glu	Ile	Ile	Ala	Gln	Pro
			20					25					30		
Phe	Leu	Asn	Phe	Lys	Val	Phe	Leu	Phe	Asn	Arg	Phe	Cys	Thr	Asp	Cys
		35					40					45			
Lys	Asn	Lys	Val	Leu	Arg	Ala	Tyr	Asn	Ile	Leu	Ile	Gly	Glu	Leu	Asp
	50					55				60					
Cys	Ser	Lys	Glu	Lys	Gly	Tyr	Cys	Ala	Ala	Leu	Tyr	Glu	Gly	Leu	Arg
65					70					75				80	
Cys	Cys	Pro	His	Glu	Arg	His	Ile	His	Val	Cys	Cys	Glu	Thr	Asp	Phe
			85					90						95	
Ile	Ala	His	Leu	Leu	Gly	Arg	Ala	Glu	Pro	Glu	Phe	Ala	Gly	Gly	Arg
		100						105					110		
Arg	Glu	Arg	His	Ala	Lys	Thr	Ile	Asp	Ile	Ala	Gln	Glu	Glu	Val	Leu
		115						120					125		
Thr	Cys	Leu	Gly	Ile	His	Leu	Tyr	Glu	Arg	Leu	His	Arg	Ile	Trp	Gln
		130					135					140			
Lys	Leu	Arg	Ala	Glu	Glu	Gln	Thr	Trp	Gln	Met	Leu	Phe	Tyr	Leu	Gly
145					150					155				160	
Val	Asp	Ala	Leu	Arg	Lys	Ser	Phe	Glu	Met	Thr	Val	Glu	Lys	Val	Gln
			165						170					175	
Gly	Ile	Ser	Arg	Leu	Glu	Gln	Leu	Cys	Glu	Glu	Phe	Ser	Glu	Glu	Glu
		180						185					190		
Arg	Val	Arg	Glu	Leu	Lys	Gln	Glu	Lys	Lys	Arg	Gln	Lys	Arg	Lys	Asn
		195						200					205		
Arg	Arg	Lys	Asn	Lys	Cys	Val	Cys	Asp	Ile	Pro	Thr	Pro	Leu	Gln	Thr

210	215	220
Ala Asp Glu Lys Glu Val Ser Gln Glu Lys Glu Thr Asp Phe Ile Glu		
225	230	235
Asn Ser Ser Cys Lys Ala Cys Gly Ser Thr Glu Asp Gly Asn Thr Cys		
245	250	255
Val Glu Val Ile Val Thr Asn Glu Asn Thr Ser Cys Thr Cys Pro Ser		
260	265	270
Ser Gly Asn Leu Leu Gly Ser Pro Lys Ile Lys Lys Gly Leu Ser Pro		
275	280	285
His Cys Asn Gly Ser Asp Cys Gly Tyr Ser Ser Ser Met		
290	295	300

&lt;210&gt; 3584

&lt;211&gt; 321

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3584

Met Ser Val Gln Glu Ala Gly Ala Thr Ser Pro Pro Ala Arg Ile Leu
1 5 10 15
Lys Glu Pro Gly Pro Ala Gln Pro Leu Ser Ala Gly Pro Glu Trp Asp
20 25 30
Arg Gly Arg Gly Val Arg Arg Arg Cys Gly Pro Gly Val Leu Leu Gly
35 40 45
Ala Ser Ser Val Ser Trp Gly Leu Ala Thr Ser Gly His Gln Gly Arg
50 55 60
Gly Cys Gly Asp Gly Gly Gly Ala Arg Val Pro Thr Lys Ser Val Pro
65 70 75 80

Gly Gly Gly Pro Arg Ala Ser Arg Ser Val Arg Glu Val Ala Gly Gly  
85 90 95  
Gly Phe Ala Cys Asn Pro Gly Lys Gly Pro Ala Ala Val Arg Leu Ala  
100 105 110  
Leu Gly Gly Gly Trp Lys Ile Ser Lys Ser Pro Ile Pro Val Gln Met  
115 120 125  
Ala Ala Gly Ala Ala Gly Cys Arg Thr Gln Ala Arg Gly Gln Arg Leu  
130 135 140  
Thr Ser Arg Gly Arg Glu Ser Pro Glu Ala Thr Gly Val Pro Glu Arg  
145 150 155 160  
Arg Gly Asp Pro Glu Thr Arg Arg Asn Arg Lys Ser Leu Thr Pro Gly  
165 170 175  
Ser Gly Glu Phe Gly Val Arg Ser Gln Ser Cys Asp Ser Thr Val Pro  
180 185 190  
Glu Ser Leu Glu Arg Ala Leu Trp Ala Gln Ser Ser Gln Leu Ala Gly  
195 200 205  
Gly Pro Gly Leu Ala Pro Arg Pro Gly Ala Ser Gly Arg Gly Arg Trp  
210 215 220  
Val Ser Ala Pro Leu Pro Pro Lys Gly Thr Glu Thr Phe Phe Cys Val  
225 230 235 240  
Leu Pro Ser Ala Leu Arg Ala Ala Leu Ser Cys Gly Pro Ser Trp Gly  
245 250 255  
Glu Asp Ser Gly Pro Arg His Arg Glu Leu Arg Pro Asp Pro Asp Ser  
260 265 270  
Arg Arg Ala Ser Ala Glu Arg Ser Pro Arg Cys Pro Pro Gly Ser Pro  
275 280 285  
Arg Lys Ala Gly Pro Gly Arg Arg Asp Ala Arg Gly Ala Ala Leu Gly  
290 295 300  
Gly Ala Phe Arg Val Leu Ala Gly Arg Ala Leu Leu Arg Arg Gly Met

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Arg Thr Tyr Ser Leu Lys Arg Glu Leu Gly Pro Ala Thr Ser Val Gly  
 145                      150                      155                      160  
 Leu Gly Gln Pro Ser Gln Ser Glu Thr Pro Ala Arg Ser Asp Thr Lys  
                          165                      170                      175  
 Glu Glu Glu Pro Pro Leu Gln Ala His Pro Val Val Arg Gln Lys Ile  
                          180                      185                      190  
 Glu Gln Glu Gln Pro Leu Gly Pro Gln Gly Val Gly Val Gln Gly Pro  
                          195                      200                      205  
 Pro Thr Val Val Glu His Met Ser Tyr Ser Ala Tyr Thr Pro Thr Asp  
                          210                      215                      220  
 Leu His Lys Leu Gly Lys Gln Cys Gln Gln Cys Met Gly Glu Pro Leu  
 225                      230                      235                      240  
 Ser Thr Trp Met Leu Cys Leu Leu Asp Glu Gly Ala Asp Gly Ile Val  
                          245                      250                      255  
 Cys Ser Ala Ser Glu Met Glu Lys Leu Ala Ser Ile Met Thr His Pro  
                          260                      265                      270  
 Ser Asn Ser Asp Cys Arg  
                          275

&lt;210&gt; 3586

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3586

Met Pro Leu Val Asn Thr Leu Val Phe Trp Gly Val Ser Gly Asn Ser  
 1                      5                      10                      15  
 Val Gly Gln Asp Cys Phe Ile Tyr Gly Ser Phe Arg Val Cys Tyr Tyr

20 25 30  
 Leu Pro Leu Ile Phe Thr Tyr His Leu Ser Phe Pro Val Phe Ser Tyr  
 35 40 45  
 Leu Phe Leu Asn Phe His Ser Pro Lys Lys Met Ser Val Phe Gly Pro  
 50 55 60  
 Val Pro Lys Glu Ser Ala Ile Arg Ile Leu Arg Gly Ile Ile Leu Asn  
 65 70 75 80  
 Gln Tyr Ile Asn Phe Arg Gly Trp Pro Gln Asp Leu Gln Gln Gly Ser  
 85 90 95  
 Val Phe Leu Cys Leu Thr Leu Gln Gly Phe Arg Gly Gln Gly Val Ser  
 100 105 110  
 Ser Asn Met Arg Val Arg Gly Trp  
 115 120

&lt;210&gt; 3587

&lt;211&gt; 499

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3587

Met Thr Glu Glu Ser Ser Asp Val Pro Arg Glu Leu Ile Glu Ser Ile  
 1 5 10 15  
 Lys Asp Val Ile Gly Arg Lys Ile Lys Ile Ser Val Lys Lys Lys Val  
 20 25 30  
 Lys Leu Glu Val Lys Gly Asp Lys Val Glu Asn Lys Val Leu Val Leu  
 35 40 45  
 Thr Ser Cys Arg Ala Phe Leu Val Thr Ala Arg Ile Pro Thr Lys Leu  
 50 55 60



Glu Leu Thr Phe Ser Tyr Leu Glu Ile His Gly Val Val Cys Ser Lys  
65 70 75 80  
Ser Ala Gln Met Ile Val Glu Thr Glu Lys Cys Ser Ile Ser Met Lys  
85 90 95  
Met Ala Ser Pro Glu Asp Val Ser Glu Val Leu Ala His Ile Gly Thr  
100 105 110  
Cys Leu Arg Lys Ile Phe Pro Gly Leu Ser Pro Val Arg Ile Met Lys  
115 120 125  
Lys Val Ser Met Glu Pro Ser Glu Arg Leu Ala Ser Leu Gln Ala Leu  
130 135 140  
Trp Asp Ser Gln Thr Val Ala Glu Gln Gly Pro Cys Gly Gly Phe Ser  
145 150 155 160  
Gln Met Tyr Ala Cys Val Cys Asp Trp Leu Gly Phe Ser Tyr Arg Glu  
165 170 175  
Glu Val Gln Trp Asp Val Asp Thr Ile Tyr Leu Thr Gln Asp Thr Arg  
180 185 190  
Glu Leu Asn Leu Gln Asp Phe Ser His Leu Asp His Arg Asp Leu Ile  
195 200 205  
Pro Ile Ile Ala Ala Leu Glu Tyr Asn Gln Trp Phe Thr Lys Leu Ser  
210 215 220  
Ser Lys Asp Leu Lys Leu Ser Thr Asp Val Cys Glu Gln Ile Leu Arg  
225 230 235 240  
Val Val Ser Arg Ser Asn Arg Leu Glu Glu Leu Val Leu Glu Asn Ala  
245 250 255  
Gly Leu Arg Thr Asp Phe Ala Gln Lys Leu Ala Ser Ala Leu Ala His  
260 265 270  
Asn Pro Asn Ser Gly Leu His Thr Ile Asn Leu Ala Gly Asn Pro Leu  
275 280 285  
Glu Asp Arg Gly Val Ser Ser Leu Ser Ile Gln Phe Ala Lys Leu Pro

290                      295                      300  
 Lys Gly Leu Lys His Leu Asn Leu Ser Lys Thr Ser Leu Ser Pro Lys  
 305                      310                      315                      320  
 Gly Val Asn Ser Leu Ser Gln Ser Leu Ser Ala Asn Pro Leu Thr Ala  
                          325                      330                      335  
 Ser Thr Leu Val His Leu Asp Leu Ser Gly Asn Val Leu Arg Gly Asp  
                          340                      345                      350  
 Asp Leu Ser His Met Tyr Asn Phe Leu Ala Gln Pro Asn Ala Ile Val  
                          355                      360                      365  
 His Leu Asp Leu Ser Asn Thr Glu Cys Ser Leu Asp Met Val Cys Gly  
                          370                      375                      380  
 Ala Leu Leu Arg Gly Cys Leu Gln Tyr Leu Ala Val Leu Asn Leu Ser  
 385                      390                      395                      400  
 Arg Thr Val Phe Ser His Arg Lys Gly Lys Glu Val Pro Pro Ser Phe  
                          405                      410                      415  
 Lys Gln Phe Phe Ser Ser Ser Leu Ala Leu Met His Ile Asn Leu Ser  
                          420                      425                      430  
 Gly Thr Lys Leu Ser Pro Glu Pro Leu Lys Ala Leu Leu Leu Gly Leu  
                          435                      440                      445  
 Ala Cys Asn His Asn Leu Lys Gly Val Ser Leu Asp Leu Ser Asn Cys  
                          450                      455                      460  
 Glu Leu Arg Ser Gly Gly Ala Gln Val Leu Glu Gly Cys Ile Ala Glu  
 465                      470                      475                      480  
 Ile His Asn Ile Thr Gln Leu Gly Thr Arg Tyr Arg Asn Ala Val Leu  
                          485                      490                      495  
 Arg Val Tyr

&lt;210&gt; 3588

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3588

Met Leu Leu Phe Asn Trp Ile Cys Ile Val Ile Thr Gly Leu Ala Met

1 5 10 15

Asp Met Gln Leu Leu Met Ile Pro Leu Ile Met Ser Val Leu Tyr Val

20 25 30

Trp Ala Gln Leu Asn Arg Asp Met Ile Val Ser Phe Trp Phe Gly Thr

35 40 45

Arg Phe Lys Ala Cys Tyr Leu Pro Trp Val Ile Leu Gly Phe Asn Tyr

50 55 60

Ile Ile Gly Gly Ser Tyr Pro Met Asp Leu Gly Gly Arg Asn Phe Leu

65 70 75 80

Ser Thr Pro Gln Phe Leu Tyr Arg Trp Leu Pro Ser Arg Arg Gly Gly

85 90 95

Val Ser Gly Phe Gly Val Pro Pro Ala Ser Met Arg Arg Ala Ala Asp

100 105 110

Gln Asn Gly Gly Gly Gly Arg His Asn Trp Gly Gln Gly Phe Arg Leu

115 120 125

Gly Asp Gln

130

&lt;210&gt; 3589

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3589

Met His Thr Gln Pro Leu Lys Glu Ala Lys Arg Met Pro Asp Arg Pro  
 1 5 10 15  
 Ile Lys Trp Asp Lys Ser Tyr Tyr Ser Phe Thr Gly Phe Lys Asp Pro  
 20 25 30  
 Asp Glu Asp Leu Glu Gln Val Ser Arg Val Glu Thr Thr Leu Thr Ser  
 35 40 45  
 Trp Leu Asp Asn Asn Gly Lys Ser Ala Val Lys Lys Leu Lys Asn Ser  
 50 55 60  
 Leu Pro Leu Arg Lys Glu Leu Asp Arg Leu Lys Asp Glu Leu Ser His  
 65 70 75 80  
 Gln Leu Gln Leu Ser Asp Ile Arg Trp Gln Arg Ser Trp Gly Ile Ala  
 85 90 95  
 His Arg Cys Ser Gln Leu His Ser Leu Ser Arg Leu Ala Gln Gln Asn  
 100 105 110  
 Leu Glu Thr Leu Lys Lys Ala Lys Gly Cys Thr Ile Ile Phe Thr Asp  
 115 120 125  
 Arg Ser Gly Met Ser Ala Val Gly His Val Met Leu Gly Thr Met Asp  
 130 135 140  
 Val His His His Trp Thr Lys Leu Phe Glu Arg Leu Pro Ser Tyr Phe  
 145 150 155 160  
 Asp Leu Gln Arg Arg Leu Met Ile Leu Glu Asp Gln Ile Ser Tyr Leu  
 165 170 175  
 Leu Gly Gly Ile Gln Val Val Tyr Ile Glu Glu Leu Gln Pro Val Leu  
 180 185 190  
 Thr Leu Glu Glu Tyr Tyr Ser Leu Leu Asp Val Phe Tyr Asn Arg Leu  
 195 200 205

Leu Lys Ser Arg Ile Leu Phe His Pro Arg Ser Leu Arg Gly Leu Gln  
 210 215 220  
 Met Ile Leu Asn Ser Asp Arg Tyr Ala Pro Ser Leu His Glu Leu Gly  
 225 230 235 240  
 His Phe Asn Ile Pro Thr Leu Cys Asp Pro Ala Asn Leu Gln Trp Phe  
 245 250 255  
 Ile Leu Thr Lys Ala Gln Gln Ala Arg Glu Asn Met Lys Arg Lys Glu  
 260 265 270  
 Glu Leu Lys Val Ile Glu Asn Glu Leu Ile Gln Ala Ser Thr Lys Lys  
 275 280 285  
 Phe Ser Leu Glu Lys Leu Tyr Lys Glu Pro Ser Ile Ser Ser Ile Gln  
 290 295 300  
 Met Val Asp Cys Cys Lys Arg Leu Leu Glu Gln Ser Leu Pro Tyr Leu  
 305 310 315 320  
 His Gly Met His Leu Cys Ile Ser His Phe Tyr Ser Val Met Gln Asp  
 325 330 335  
 Gly Asp Leu Cys Ile Pro Trp Asn Trp Lys Asn Gly Glu Ala Ile Lys  
 340 345 350

<210> 3590

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3590

Met Ala Ala Ala Pro Asp Tyr Pro Ala Pro Phe Tyr Pro Ser Ser Gly  
 1 5 10 15  
 Arg Asn Pro Ser Pro Arg Pro Phe Pro Leu Lys Gly Asn Gly Pro Lys

20 25 30  
 Val Gly Arg Ala Ala Arg Leu Pro Arg Ser Ile Gln Val Lys Arg Glu  
 35 40 45  
 Ser Asp Gln Thr Gly Glu Pro Arg Gly Pro Ile Phe Arg Asp Leu Thr  
 50 55 60  
 Gly His Leu Asp Arg Pro Leu Gln Leu Gly Thr Phe Gln Glu Asn Glu  
 65 70 75 80  
 Gly Asn Val Val Ile Ala Pro Glu Pro His Ser Ser Ser Glu Val Leu  
 85 90 95  
 Phe Thr Ser Leu Trp Lys Lys Ile Gly Tyr Leu Phe Leu Val Glu Arg  
 100 105 110  
 Val Glu Ile  
 115

&lt;210&gt; 3591

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3591

Met Ile Ser Ser Arg Met Pro Cys Leu Leu Val Leu Asn Ser Val Ser  
 1 5 10 15  
 Phe Pro Leu Phe Leu Ala Val Tyr Tyr Trp Pro Ala Ser Leu Asp Gly  
 20 25 30  
 Ala Ala Gly Met Val Gln Ile Asn Glu Gly His Thr Lys Val Ile Leu  
 35 40 45  
 Leu Lys Ala His Val Gly Leu Arg Pro Glu Leu Thr Asp Thr Glu Met  
 50 55 60

Ser Leu Ile Leu Cys Leu Phe His Cys Leu Trp Tyr Tyr Ser Ala Phe  
 65 70 75 80  
 Thr Glu Glu Arg Val Leu Gly Asn Arg Asn Thr Arg Ile Ile Leu Val  
 85 90 95  
 Gln Gln Leu Leu Ala Thr Pro Lys Phe Thr Tyr Phe Leu Pro Pro Ala  
 100 105 110  
 Phe Phe Ile Asp Leu Ala Ala Ser Glu Ile Phe Ala Ala Ser Gln  
 115 120 125

<210> 3592

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3592

Met His Gly Ser Lys Trp Leu Asp Ser Trp Val Gly Trp Gly Ser Gln  
 1 5 10 15  
 Ser Arg Leu Pro Glu Gly Leu Glu Val Thr Pro Pro Gly Gly Asp Gly  
 20 25 30  
 Ser Ser Gln Val Gly Cys His Gln Ser Arg Gln His Cys Leu Leu Gly  
 35 40 45  
 Thr Pro Gly Glu Ala Asp Arg Val Ser Gly Phe Gln Leu Gly Gly Ser  
 50 55 60  
 Pro Ala Glu Asn Pro Val Lys Pro Ala Phe His Ser Ser Pro Val Cys  
 65 70 75 80  
 Pro Glu Pro Gly Leu Arg Ala Ala Leu Cys Met Pro Ala Leu Pro Thr  
 85 90 95  
 Trp Gln Ser Ser Gly Gly Arg Thr Pro Arg Leu Ser Gly Asp Ser Gln

100	105	110
Ala Asn Val Ser Ile Pro Gly Ser Ala Leu Ser Cys His Glu Phe Arg		
115	120	125
Lys Ala Glu Ala Ala Gln Gln Met Gly Thr Arg Gly Arg Thr Ala Ile		
130	135	140
His Ser Leu Ser Ser His Pro Gln Ala Cys Arg Ala Pro Gly Leu Trp		
145	150	155
Cys		160

&lt;210&gt; 3593

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3593

Met Pro Leu Gly Ala Gly Gly Leu Gly Arg Leu Ala Arg Gly Leu Thr		
1	5	10
Ser Gly Val Glu Gly Asn Gly Ile Lys Ala Thr Glu Phe Pro Gly Pro		
20	25	30
Gly Pro Glu Arg Tyr Pro Cys Leu His Leu Ala Leu Pro Cys Ala Trp		
35	40	45
Leu Ser Pro Ser Ser Trp Ala His Ser His Val Pro Pro Ile Thr Arg		
50	55	60
His Leu His Phe Cys Trp Cys Phe Trp Glu Ser Asp Leu Gln Thr Ala		
65	70	75
Ser Ala Ser Pro Gly Ser Leu Leu Ser Gly Ala Phe Ser Arg Thr Val		
85	90	95



Lys Gln Thr Leu Gly Ala Arg Pro Arg Asp Pro His Phe Lys Tyr Lys

100

105

110

Val

<210> 3594

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3594

Met Gln Val Val Arg Glu Val Gly Glu Ser Gln Gln Ser Gln Ala Ser

1

5

10

15

Pro Ser Ser His Ala Ile Gln Arg Ala Ile Leu Thr Pro Thr Val Pro

20

25

30

Pro Leu Cys Asn Ser Thr Glu Ser Val Phe Arg Gln Trp Thr Ser Arg

35

40

45

Ala Glu Asn Leu Pro His Val Thr His Leu Pro Ala Ala Val Glu Lys

50

55

60

Gly Phe Ser Ser Ser Cys Thr Cys Gly Val Tyr Met Pro Asp Met Cys

65

70

75

80

Pro Pro Leu Ser Ser Gly Gln Glu Ala Ser Gln Pro Val Gln Ile Val

85

90

95

Thr Lys Phe Ser

100

<210> 3595

&lt;211&gt; 418

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3595

Met Leu Glu Asn His Ile Leu His Lys Arg Ile Tyr Ile Leu Thr Phe

1 5 10 15

Phe Ser Gln Gln Ile Phe Ile Leu Cys His Ala His Phe Ile Phe Phe

20 25 30

Phe Thr Val Arg Asp Phe Cys Arg Gln Asp Glu Lys Cys Asp Tyr Tyr

35 40 45

Phe Ser Val Asp Ala Asp Val Val Leu Thr Asn Pro Arg Thr Leu Lys

50 55 60

Ile Leu Ile Glu Gln Asn Arg Lys Ile Ile Ala Pro Leu Val Thr Arg

65 70 75 80

His Gly Lys Leu Trp Ser Asn Phe Trp Gly Ala Leu Ser Pro Asp Gly

85 90 95

Tyr Tyr Ala Arg Ser Glu Asp Tyr Val Asp Ile Val Gln Gly Asn Arg

100 105 110

Val Gly Val Trp Asn Val Pro Tyr Met Ala Asn Val Tyr Leu Ile Lys

115 120 125

Gly Lys Thr Leu Arg Ser Glu Met Asn Glu Arg Asn Tyr Phe Val Arg

130 135 140

Asp Lys Leu Asp Pro Asp Met Ala Leu Cys Arg Asn Ala Arg Glu Met

145 150 155 160

Thr Leu Gln Arg Glu Lys Asp Ser Pro Thr Pro Glu Thr Phe Gln Met

165 170 175

Leu Ser Pro Pro Lys Gly Val Phe Met Tyr Ile Ser Asn Arg His Glu

180 185 190

Phe Gly Arg Leu Leu Ser Thr Ala Asn Tyr Asn Thr Ser His Tyr Asn  
195 200 205  
Asn Asp Leu Trp Gln Ile Phe Glu Asn Pro Val Asp Trp Lys Glu Lys  
210 215 220  
Tyr Ile Asn Arg Asp Tyr Ser Lys Ile Phe Thr Glu Asn Ile Val Glu  
225 230 235 240  
Gln Pro Cys Pro Asp Val Phe Trp Phe Pro Ile Phe Ser Glu Lys Ala  
245 250 255  
Cys Asp Glu Leu Val Glu Glu Met Glu His Tyr Gly Lys Trp Ser Gly  
260 265 270  
Gly Lys His His Asp Ser Arg Ile Ser Gly Gly Tyr Glu Asn Val Pro  
275 280 285  
Thr Asp Asp Ile His Met Lys Gln Val Asp Leu Glu Asn Val Trp Leu  
290 295 300  
His Phe Ile Arg Glu Phe Ile Ala Pro Val Thr Leu Lys Val Phe Ala  
305 310 315 320  
Gly Tyr Tyr Thr Lys Gly Phe Ala Leu Leu Asn Phe Val Val Lys Tyr  
325 330 335  
Ser Pro Glu Arg Gln Arg Ser Leu Arg Pro His His Asp Ala Ser Thr  
340 345 350  
Phe Thr Ile Asn Ile Ala Leu Asn Asn Val Gly Glu Asp Phe Gln Gly  
355 360 365  
Gly Gly Cys Lys Phe Leu Arg Tyr Asn Cys Ser Ile Glu Ser Pro Arg  
370 375 380  
Lys Gly Trp Ser Phe Met His Pro Gly Arg Leu Thr His Leu His Glu  
385 390 395 400  
Gly Leu Pro Val Lys Asn Gly Thr Arg Tyr Ile Ala Val Ser Phe Ile  
405 410 415  
Asp Pro

&lt;210&gt; 3596

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3596

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Met Pro Val Leu Pro Pro Cys Val Leu Gln Val Arg Asp Glu Gln His
  1             5             10             15
Gln Cys Pro Leu Gly Asn Leu Lys Val Pro Leu Ser Gln Leu Leu Thr
          20             25             30
Ser Glu Asp Met Thr Val Ser Gln Arg Phe Gln Leu Gly Asn Ser Gly
          35             40             45
Pro Asn Ser Thr Ile Lys Met Lys Ile Ala Leu Arg Val Leu His Leu
          50             55             60
Glu Lys Arg Glu Arg Pro Pro Asp His Gln His Ser Ala Gln Val Lys
          65             70             75             80
Arg Pro Ser Val Ser Lys Glu Gly Arg Lys Thr Ser Ile Lys Ser His
          85             90             95
Met Ser Gly Ser Pro Gly Pro Gly Gly Ser Asn Thr Ala Pro Ser Thr
          100            105            110
Pro Val Ile Gly Gly Ser Asp Lys Pro Gly Met Glu Glu Lys Ala Gln
          115            120            125
Pro Pro Glu Ala Gly Pro Gln Gly Leu His Asp Leu Gly Arg Ser Ser
          130            135            140
Ser Ser Leu Leu Ala Ser Pro Gly His Ile Ser Val Lys Glu Pro Thr
          145            150            155            160

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Pro Ser Ile Ala Ser Asp Ile Ser Leu Pro Ile Ala Thr Gln Glu Leu  
                     165                    170                    175  
 Arg Gln Arg Leu Arg Gln Leu Glu Asn Gly Thr Thr Leu Gly Gln Ser  
                     180                    185                    190  
 Pro Leu Gly Gln Ile Gln Leu Thr Ile Gln His Ser Ser Gln Lys Gln  
                     195                    200                    205  
 Ala Tyr Arg Gly Arg Ala Cys Leu Gln Lys Pro His Cys Leu Leu  
                     210                    215                    220

<210> 3597

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3597

Met Asp Trp Thr Trp Arg Val Leu Cys Val Leu Ala Val Ala Pro Gly  
       1                    5                    10                    15  
 Ala Arg Leu Gln Val Gln Leu Thr Gln Ser Gly Ala Ala Leu Lys Lys  
                     20                    25                    30  
 Pro Gly Ala Ser Leu Lys Leu Ser Cys Arg Ala Ser Ala Asp Ser Ser  
                     35                    40                    45  
 Ile Thr Tyr Asn Ile His Trp Leu Arg Arg Pro Pro Gly Gln Gly Phe  
                     50                    55                    60  
 Glu Trp Leu Gly Lys Ile Asn Ser Arg Asp Ser Ile Thr Asn Ser Ala  
                     65                    70                    75                    80  
 Pro Arg Phe Gln Gly Ser Val Thr Met Thr Arg Asp Arg Ser Ser Ser  
                     85                    90                    95  
 Thr Phe Tyr Leu Asp Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val

100	105	110
Tyr Tyr Cys Thr Arg Ser Ile Trp Pro Leu Asp Tyr Phe Asp Ser Trp		
115	120	125
Gly Gln Gly Thr Gln Val Thr Val Ser Pro Ala Pro Thr Lys Ala Pro		
130	135	140
Asp Val Phe Pro Ile Ile Ser Gly Cys Arg His Pro Lys Asp Asn Ser		
145	150	155
Pro Val Val Leu Ala Cys Leu Ile Thr Gly Tyr His Pro Thr Ser Val		
165	170	175
Thr Val Thr Trp Tyr Met Gly Thr Gln Ser Gln Pro Gln Arg Thr Phe		
180	185	190
Pro Glu Ile Gln Arg Arg Asp Ser Tyr Tyr Met Thr Ser Ser Gln Leu		
195	200	205
Ser Thr Pro Leu Gln Gln Trp Arg Gln Gly Glu Tyr Lys Cys Val Val		
210	215	220
Gln His Thr Ala Ser Lys Ser Lys Lys Glu Ile Phe Arg Trp Pro Glu		
225	230	235
Ser Pro Lys Ala Gln Ala Ser Ser Val Pro Thr Ala Gln Pro Gln Ala		
245	250	255
Glu Gly Ser Leu Ala Lys Ala Thr Thr Ala Pro Ala Thr Thr Arg Asn		
260	265	270
Thr Gly Arg Gly Gly Glu Glu Lys Lys Lys Glu Lys Glu Lys Glu Glu		
275	280	285
Gln Glu Glu Arg Glu Thr Lys Thr Gln Ser Val Arg Ala Thr Pro Ser		
290	295	300
Leu Leu Ala Ser Thr Cys		
305	310	

&lt;210&gt; 3598

&lt;211&gt; 324

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3598

Met Pro Thr Thr Pro Val Lys Ala Lys Arg Val Ser Thr Phe Gln Glu

1 5 10 15

Phe Glu Ser Asn Thr Ser Asp Ala Trp Asp Ala Gly Glu Asp Asp Asp

20 25 30

Glu Leu Leu Ala Met Ala Ala Glu Ser Leu Asn Ser Glu Val Val Met

35 40 45

Glu Thr Ala Asn Arg Val Leu Arg Asn His Ser Gln Arg Gln Gly Arg

50 55 60

Pro Thr Leu Gln Glu Gly Pro Gly Leu Gln Gln Lys Pro Arg Pro Glu

65 70 75 80

Ala Glu Pro Pro Ser Pro Pro Ser Gly Asp Leu Arg Leu Val Lys Ser

85 90 95

Val Ser Glu Ser His Thr Ser Cys Pro Ala Glu Ser Ala Ser Asp Ala

100 105 110

Ala Pro Leu Gln Arg Ser Gln Ser Leu Pro His Ser Ala Thr Val Thr

115 120 125

Leu Gly Gly Thr Ser Asp Pro Ser Thr Leu Ser Ser Ser Ala Leu Ser

130 135 140

Glu Arg Glu Ala Ser Arg Leu Asp Lys Phe Lys Gln Leu Leu Ala Gly

145 150 155 160

Pro Asn Thr Asp Leu Glu Glu Leu Arg Arg Leu Ser Trp Ser Gly Ile

165 170 175

Pro Lys Pro Val Arg Pro Met Thr Trp Lys Leu Leu Ser Gly Tyr Leu





Val Pro His Arg Tyr Gln Ser Gly Tyr His Pro Val Ala Pro Leu Gly  
 20 25 30  
 Ser Arg Ile Leu Thr Asp Pro Ala Lys Val Phe Glu His Asn Met Trp  
 35 40 45  
 Asp His Met Gln Trp Ser Lys Glu Glu Glu Ala Ala Ala Arg Lys Lys  
 50 55 60  
 Val Lys Glu Asn Ser Ala Val Arg Val Leu Leu Glu Glu Gln Val Lys  
 65 70 75 80  
 Tyr Glu Arg Glu Ala Ser Lys Tyr Trp Asp Thr Phe Tyr Lys Ile His  
 85 90 95  
 Lys Asn Lys Phe Phe Lys Asp Arg Asn Trp Leu Leu Arg Glu Phe Pro  
 100 105 110  
 Glu Ile Leu Pro Val Asp Gln Lys Pro Glu Glu Lys Ala Arg Glu Ser  
 115 120 125  
 Ser Trp Asp His Val Lys Thr Ser Ala Thr Asn Arg Phe Ser Arg Met  
 130 135 140  
 His Cys Pro Thr Val Pro Asp Glu Lys Asn His Tyr Glu Lys Ser Ser  
 145 150 155 160  
 Gly Ser Ser Glu Gly Gln Ser Lys Thr Glu Ser Asp Phe Ser Asn Leu  
 165 170 175  
 Asp Ser Glu Lys His Lys Lys Gly Pro Met Glu Thr Gly Leu Phe Pro  
 180 185 190  
 Gly Ser Asn Ala Thr Phe Arg Ile Leu Glu Val Gly Cys Gly Ala Gly  
 195 200 205  
 Asn Ser Val Phe Pro Ile Leu Asn Thr Leu Glu Asn Ser Pro Glu Ser  
 210 215 220  
 Phe Leu Tyr Cys Cys Asp Phe Ala Ser Gly Ala Val Glu Leu Val Lys  
 225 230 235 240  
 Ser His Ser Ser Tyr Arg Ala Thr Gln Cys Phe Ala Phe Val His Asp

245 250 255  
Val Cys Asp Asp Gly Leu Pro Tyr Pro Phe Pro Asp Gly Ile Leu Asp  
260 265 270  
Val Ile Leu Leu Val Phe Val Leu Ser Ser Ile His Pro Asp Arg Met  
275 280 285  
Gln Gly Val Val Asn Arg Leu Ser Lys Leu Leu Lys Pro Gly Gly Met  
290 295 300  
Leu Leu Phe Arg Asp Tyr Gly Arg Tyr Asp Lys Thr Gln Leu Arg Phe  
305 310 315 320  
Lys Lys Gly His Cys Leu Ser Glu Asn Phe Tyr Val Arg Gly Asp Gly  
325 330 335  
Thr Arg Ala Tyr Phe Phe Thr Lys Gly Glu Val His Ser Met Phe Cys  
340 345 350  
Lys Ala Ser Leu Asp Glu Lys Gln Asn Leu Val Asp Arg Arg Leu Gln  
355 360 365  
Val Asn Arg Lys Lys Gln Val Lys Met His Arg Val Trp Ile Gln Gly  
370 375 380  
Lys Phe Gln Lys Pro Leu His Gln Thr Gln Asn Ser Ser Asn Met Val  
385 390 395 400  
Ser Thr Leu Leu Ser Gln Asp  
405

&lt;210&gt; 3600

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3600

Met	Val	Cys	Pro	Glu	Phe	Val	Pro	Ser	Asp	Val	Gln	Met	Cys	Leu	Glu
1				5					10					15	
Phe	Leu	Pro	Ser	Gly	Gly	Phe	Val	Val	Ser	Leu	Asp	Phe	Arg	Ser	Glu
			20					25					30		
Ala	Thr	Glu	Leu	Cys	Ser	Val	Thr	Ala	Leu	Lys	Gly	Ala	Arg	Leu	Glu
		35					40					45			
Leu	Leu	Val	Pro	Pro	Asp	Gly	Phe	Val	Ala	Leu	Leu	Thr	Ser	Gly	Met
	50					55					60				
Lys	Pro	Gln	Thr	Leu	Thr	Val	Ser	Val	Thr	Ala	His	Lys	Gly	Ser	Ala
65					70					75				80	
Asp	Pro	Glu	Glu	Ala	Ala	Ala	Lys	Phe	Ile	Val	Lys	Ser	Lys	Arg	Thr
				85					90					95	
Lys	Leu	Pro	Gln	His	Glu	Thr	Ala	Pro	Gln	Arg	Ile	Ala	Thr	Ala	Ala
		100						105					110		
Trp	Val	Ala	Ser	Phe	Tyr	Ser	Leu	Thr	Trp	Pro	His	Pro	His	Pro	Ala
	115						120				125				
Asp	Trp	Ser	Ile	Leu	Gln	Arg	Gly	Asp	Trp	Ser	Val	Phe	Thr	Gln	Cys
	130					135					140				

&lt;210&gt; 3601

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3601

Met	Gln	Ser	Leu	Pro	Thr	Ala	Pro	Ser	Phe	Gly	Val	Ser	Thr	Gly	Leu
1				5					10					15	
Leu	Ala	Ala	Ala	Ala	Phe	Tyr	Gln	Thr	Ser	Gln	Pro	Pro	Ser	Pro	Pro

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Glu Met Glu Ile Val Val Glu Glu Thr Ile Ser Val Arg Asp Cys Leu  
                   35                                  40                                  45  
 Lys Leu Met Leu Lys Lys Ser Gly Leu Gln Gly Asp Ala Trp His Leu  
                   50                                  55                                  60  
 Arg Lys Met Asp Trp Cys Tyr Glu Ala Gly Glu Pro Leu Cys Glu Glu  
                   65                                  70                                  75                                  80  
 Asp Ala Thr Leu Lys Glu Leu Leu Ile Cys Ser Gly Asp Thr Leu Leu  
                                   85                                  90                                  95  
 Leu Ile Glu Gly Gln Leu Pro Pro Leu Gly Phe Leu Lys Val Pro Ile  
                                   100                                  105                                  110  
 Trp Trp Tyr Gln Leu Gln Gly Pro Ser Gly His Trp Glu Ser His Gln  
                                   115                                  120                                  125  
 Asp Gln Thr Asn Cys Thr Ser Ser Trp Gly Arg Val Trp Arg Ala Thr  
                                   130                                  135                                  140  
 Ser Ser Gln Gly Glu Asn Arg Met Gly Phe Gln Gln Pro Val His His  
                   145                                  150                                  155                                  160  
 Lys Glu Lys

&lt;210&gt; 3603

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3603

Met Val Thr Lys Trp Trp Gly Gln Asp Pro Pro Val Gln Leu Arg Ser  
                   1                                  5                                  10                                  15  
 Gln Leu Met Leu Trp Ile Met Glu Leu Ile Leu Trp Lys Phe Gln Ser

	20		25		30
Ser	Val	Val	Gly	Ser	Ser
			Val	Val	Thr
				Trp	Lys
				Ile	Ser
				Asp	Val
				Ala	
	35		40		45
Gly	Pro	His	Gly	Asp	His
			Ser	Cys	Ser
			Leu	Gln	His
				Leu	Glu
				Gln	Ile
	50		55		60
Ile	Gly	Ser	Val	Ser	Asn
			Tyr	Pro	Arg
			Tyr	Thr	Gly
				Ser	Arg
				Ser	Cys
	65		70		75
					80
Asp	Arg	Gly	Glu	Asn	Pro
			Val	Ser	Leu
			Ser	Lys	Arg
			Ile	Lys	Cys
			Thr		
				85	90
				95	
Trp	Met	Leu	Gly	Ala	Ser
			Gly	Phe	Pro
			Pro	Arg	Cys
			Pro	Ser	Gly
			Arg		
				100	105
				110	
Asp	His	Ser	Arg	Asp	His
			Pro	Gly	Lys
			Ser	Gln	Val
			Pro	Ala	Leu
			Glu		
				115	120
				125	
Leu	Ala	Asn	Gln	Leu	Ala
			Ala	Trp	Gly
			Leu	Trp	Ser
			Ser	Val	Val
			Lys		
				130	135
				140	
Ser	Trp	Gly	Phe	Arg	Ala
			Gly	Glu	Thr
			Glu	Ala	Pro
			Ile	Ser	Ala
			Leu		
				145	150
				155	160
Ser	Ser	Ala	His	Ala	
				165	

&lt;210&gt; 3604

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3604

Met Val Ser Cys Asp Cys Gly Val Cys Glu Ser Arg Ser Ile Leu Val

1

5

10

15

Leu Cys Ala Ser Leu Phe Ala Val Leu Gly Gly Leu Ala Arg Phe Arg  
                   20                                  25                                  30  
 Ile Arg Gly Thr Gly Gly Leu Glu Arg Gly Met Arg Trp Pro Ser Arg  
                   35                                  40                                  45  
 Ala Arg Arg Met Thr Ala Asn Trp Cys Leu Gly Gly Leu Ser Arg Arg  
                   50                                  55                                  60  
 Asn Cys Gly Ala Arg Ala Ala Leu Cys Pro Leu Pro Arg Ser Asn Leu  
                   65                                  70                                  75                                  80  
 Trp Arg Pro Phe Thr Ala Leu Ala Leu Val Gly Ser Arg Gly Lys Glu  
                                   85                                  90                                  95  
 Phe Gly Asn Val Trp Leu Cys Val Thr Met Lys  
                                   100                                  105

<210> 3605

<211> 402

<212> PRT

<213> Homo sapiens

<400> 3605

Met Cys Glu Leu Asp Ile Leu His Asp Ser Leu Tyr Gln Phe Cys Pro  
           1                                  5                                  10                                  15  
 Glu Leu His Leu Lys Arg Leu Asn Ser Leu Thr Leu Ala Cys His Ala  
                   20                                  25                                  30  
 Leu Leu Asp Cys Lys Thr Leu Thr Leu Thr Glu Leu Gly Arg Asn Leu  
                   35                                  40                                  45  
 Pro Thr Lys Ala Arg Thr Lys His Asn Ile Lys Arg Ile Asp Arg Leu  
                   50                                  55                                  60  
 Leu Gly Asn Arg His Leu His Lys Glu Arg Leu Ala Val Tyr Arg Trp

65	70	75	80
His Ala Ser Phe Ile Cys Ser Gly Asn Thr Met Pro Ile Val Leu Val			
	85	90	95
Asp Trp Ser Asp Ile Arg Glu Gln Lys Arg Leu Met Val Leu Arg Ala			
	100	105	110
Ser Val Ala Leu His Gly Arg Ser Val Thr Leu Tyr Glu Lys Ala Phe			
	115	120	125
Pro Leu Ser Glu Gln Cys Ser Lys Lys Ala His Asp Gln Phe Leu Ala			
	130	135	140
Asp Leu Ala Ser Ile Leu Pro Ser Asn Thr Thr Pro Leu Ile Val Ser			
145	150	155	160
Asp Ala Gly Phe Lys Val Pro Trp Tyr Lys Ser Val Glu Lys Leu Gly			
	165	170	175
Trp Tyr Trp Leu Ser Arg Val Arg Gly Lys Val Gln Tyr Ala Asp Leu			
	180	185	190
Gly Ala Glu Asn Trp Lys Pro Ile Ser Asn Leu His Asp Met Ser Ser			
	195	200	205
Ser His Ser Lys Thr Leu Gly Tyr Lys Arg Leu Thr Lys Ser Asn Pro			
	210	215	220
Ile Ser Cys Gln Ile Leu Leu Tyr Lys Ser Arg Ser Lys Gly Arg Lys			
225	230	235	240
Asn Gln Arg Ser Thr Arg Thr His Cys His His Pro Ser Pro Lys Ile			
	245	250	255
Tyr Ser Ala Ser Ala Lys Glu Pro Trp Val Leu Ala Thr Asn Leu Pro			
	260	265	270
Val Glu Ile Arg Thr Pro Lys Gln Leu Val Asn Ile Tyr Ser Lys Arg			
	275	280	285
Met Gln Ile Glu Glu Thr Phe Arg Asp Leu Lys Ser Pro Ala Tyr Gly			
	290	295	300



Leu Gly Leu Arg His Ser Arg Thr Ser Ser Ser Glu Arg Phe Asp Ile  
 305                      310                      315                      320  
 Met Leu Leu Ile Ala Leu Met Leu Gln Leu Thr Cys Trp Leu Ala Gly  
                          325                      330                      335  
 Val His Ala Gln Lys Gln Gly Trp Asp Lys His Phe Gln Ala Asn Thr  
                          340                      345                      350  
 Val Arg Asn Arg Asn Val Leu Ser Thr Val Arg Leu Gly Met Glu Val  
                          355                      360                      365  
 Leu Arg His Ser Gly Tyr Thr Ile Thr Arg Glu Asp Leu Leu Val Ala  
                          370                      375                      380  
 Ala Thr Leu Leu Ala Gln Asn Leu Phe Thr His Gly Tyr Ala Leu Gly  
 385                      390                      395                      400  
 Lys Leu

<210> 3606

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3606

Met Leu Ser Leu Leu Phe Leu Cys Thr Leu His Leu Ser Leu Ser Leu  
   1                      5                      10                      15  
 Pro Ser Leu Arg Leu Thr Leu Thr Pro Ile Arg Leu Ser Ser Leu Pro  
                          20                      25                      30  
 Gly Leu Cys Cys Arg Lys Val Pro Gly Thr Ala Leu Ile Thr Ser Ala  
                          35                      40                      45  
 Lys Leu Phe Leu Met Ile Tyr Phe Leu Ser Thr Pro Pro Leu Leu Thr

50                      55                      60  
 Leu Phe Asn Ile Leu Met Thr Phe Phe Phe Val Ala Pro Pro Leu Asn  
 65                      70                      75                      80  
 Leu Leu Asn Lys Thr Tyr Phe Cys Ser Phe Ser Ile Tyr Ser Pro Lys  
                          85                      90                      95  
 Asp Ile Gly Tyr Pro Pro Pro Lys Leu Lys Phe Leu Leu His Pro Leu  
                          100                      105                      110  
 Pro Thr Ser Ala  
                          115

<210> 3607

<211> 217

<212> PRT

<213> Homo sapiens

<400> 3607

Met Thr Phe Ser Arg Cys Gln Leu Pro Cys Gln Pro Arg Ser Pro Met  
                          1                      5                      10                      15  
 Glu Thr Val Glu Thr Asn Trp Asp His Val Ser Arg Trp Lys Lys Gly  
                          20                      25                      30  
 Gly Arg Gly Arg Gly Asp His Tyr Cys Gln Val Ile Gln Lys Arg Ala  
                          35                      40                      45  
 Glu Pro Pro Ala Leu Arg Arg Glu Thr Leu Asp Ser Gln Gly Asp Ser  
                          50                      55                      60  
 Gly Lys Gly Asp Ser Ala Gln Thr Pro Ser Val Pro Glu Ala Asn Ser  
                          65                      70                      75                      80  
 Trp Lys Thr Gly Ala Arg Ala Asn Leu Asn Lys Asn Gly Gly Gly Lys  
                          85                      90                      95

Gly Gly Lys Glu Gly Ser Cys Glu Leu Pro Glu Val Gly Gln Gly Ala  
 100 105 110  
 Pro Gln Arg Met Gly Cys Tyr Glu Ser Glu Asn Met Ala Thr His Pro  
 115 120 125  
 Ala Ser Phe Ile Tyr Tyr Gln Pro Pro Gln Asn Trp Cys Leu Lys Thr  
 130 135 140  
 Ile Ile Ile Tyr Val Met Ser Leu Cys Gly Glu Leu Gly Gly Pro Ser  
 145 150 155 160  
 Ala Ser Pro Ser Leu Ala Val Ser Ala Val Thr Gly Asp Trp Pro Gly  
 165 170 175  
 Leu Ala Ser Leu Pro Gly Ser Cys Pro Gly Arg Gly Gly Cys Leu Leu  
 180 185 190  
 Ser Ala Glu Thr Val Ser Arg Ser Ile Ser Thr Ser Pro His Arg Thr  
 195 200 205  
 Ser Ser Cys Thr Thr Gly Ile Ser Ala  
 210 215

&lt;210&gt; 3608

&lt;211&gt; 777

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3608

Met Leu Asp Met Ser Phe Lys Asp Ala Glu Arg Gly Asp Asp Thr Ser  
 1 5 10 15  
 Cys Glu Asn Leu Leu Asp Ala Phe Ser Ile Lys Leu Ser Glu Thr His  
 20 25 30  
 Gly Tyr Gly Val Gln Glu Glu Phe Thr Glu Glu Asn Lys Leu Leu Glu

35	40	45
Ala Cys Ile Phe Lys Asn Asn Glu Leu Leu Lys Asn Ile Gln Asp Val		
50	55	60
Gln Ser Gln Ile Ser Lys Ile Gly Leu Lys Asp Pro Thr Val Pro Ala		
65	70	75
Val Lys His Arg Lys Lys Ser Leu Ile Arg Leu Asp Lys Val Leu Asp		
85	90	95
Glu Tyr Glu Glu Glu Lys Arg His Leu Gln Glu Met Ala Asn Ser Leu		
100	105	110
Pro His Phe Lys Asp Gly Arg Glu Lys Thr Val Asn Gln Gln Cys Gln		
115	120	125
Asn Thr Val Val Leu Trp Glu Asn Thr Lys Ala Leu Val Thr Glu Cys		
130	135	140
Leu Glu Gln Cys Gly Arg Val Leu Glu Leu Leu Lys Gln Tyr Gln Asn		
145	150	155
Phe Lys Ser Ile Leu Thr Thr Leu Ile Gln Lys Glu Glu Ser Val Ile		
165	170	175
Ser Leu Gln Ala Ser Tyr Met Gly Lys Glu Asn Leu Lys Lys Arg Ile		
180	185	190
Ala Glu Ile Glu Ile Val Lys Glu Glu Phe Asn Glu His Leu Glu Val		
195	200	205
Val Asp Lys Ile Asn Gln Val Cys Lys Asn Leu Gln Phe Tyr Leu Asn		
210	215	220
Lys Met Lys Thr Phe Glu Glu Pro Pro Phe Glu Lys Glu Ala Asn Ile		
225	230	235
Ile Val Asp Arg Trp Leu Asp Ile Asn Glu Lys Thr Glu Asp Tyr Tyr		
245	250	255
Glu Asn Leu Gly Arg Ala Leu Ala Leu Trp Asp Lys Leu Phe Asn Leu		
260	265	270

Lys Asn Val Ile Asp Glu Trp Thr Glu Lys Ala Leu Gln Lys Met Glu  
275 280 285

Leu His Gln Leu Thr Glu Glu Asp Arg Glu Arg Leu Lys Glu Glu Leu  
290 295 300

Gln Val His Glu Gln Lys Thr Ser Glu Phe Ser Arg Arg Val Ala Glu  
305 310 315 320

Ile Gln Phe Leu Leu Gln Ser Ser Glu Ile Pro Leu Glu Leu Gln Val  
325 330 335

Met Glu Ser Ser Ile Leu Asn Lys Met Glu His Val Gln Lys Cys Leu  
340 345 350

Thr Gly Glu Ser Asn Cys His Ala Leu Ser Gly Ser Thr Ala Glu Leu  
355 360 365

Arg Glu Asp Leu Asp Gln Ala Lys Thr Gln Ile Gly Met Thr Glu Ser  
370 375 380

Leu Leu Lys Ala Leu Ser Pro Ser Asp Ser Leu Glu Ile Phe Thr Lys  
385 390 395 400

Leu Glu Glu Ile Gln Gln Gln Ile Leu Gln Gln Lys His Ser Met Ile  
405 410 415

Leu Leu Glu Asn Gln Ile Gly Cys Leu Thr Pro Glu Leu Ser Glu Leu  
420 425 430

Lys Lys Gln Tyr Glu Ser Val Ser Asp Leu Phe Asn Thr Lys Lys Ser  
435 440 445

Val Leu Gln Asp His Phe Ser Lys Leu Leu Asn Asp Gln Cys Lys Asn  
450 455 460

Phe Asn Asp Trp Phe Ser Asn Ile Lys Val Asn Leu Lys Glu Cys Phe  
465 470 475 480

Glu Ser Ser Glu Thr Lys Lys Ser Val Glu Gln Lys Leu Gln Lys Leu  
485 490 495

Ser Asp Phe Leu Thr Leu Glu Gly Arg Asn Ser Lys Ile Lys Gln Val

500 505 510  
Asp Ser Val Leu Lys His Val Lys Lys His Leu Pro Lys Ala His Val  
515 520 525  
Lys Glu Leu Ile Ser Trp Leu Val Gly Gln Glu Phe Glu Leu Glu Lys  
530 535 540  
Met Glu Ser Ile Cys Gln Ala Arg Ala Lys Glu Leu Glu Asp Ser Leu  
545 550 555 560  
Gln Gln Leu Leu Arg Leu Gln Asp Asp His Arg Asn Leu Arg Lys Trp  
565 570 575  
Leu Thr Asn Gln Glu Glu Lys Trp Lys Gly Thr Glu Glu Pro Gly Glu  
580 585 590  
Lys Thr Glu Leu Phe Cys Gln Ala Leu Ala Arg Lys Arg Glu Gln Phe  
595 600 605  
Glu Ser Val Ala Gln Leu Asn Asn Ser Leu Lys Glu Tyr Gly Phe Thr  
610 615 620  
Glu Glu Glu Glu Ile Ile Met Glu Ala Thr Cys Leu Met Asp Arg Tyr  
625 630 635 640  
Gln Thr Leu Leu Arg Gln Leu Ser Glu Ile Glu Glu Glu Asp Lys Leu  
645 650 655  
Leu Pro Thr Glu Asp Gln Ser Phe Asn Asp Leu Ala His Gly Val Ile  
660 665 670  
His Trp Ile Lys Glu Ile Lys Glu Ser Leu Met Val Leu Asn Ser Ser  
675 680 685  
Glu Gly Lys Met Pro Leu Glu Glu Arg Ile Gln Lys Ile Lys Glu Ile  
690 695 700  
Ile Leu Leu Lys Pro Glu Gly Asp Ala Arg Ile Glu Thr Ile Thr Lys  
705 710 715 720  
Gln Ala Glu Ser Ser Glu Ala Pro Leu Val Gln Lys Thr Leu Thr Asp  
725 730 735

Ile Ser Asn Gln Trp Asp Asn Thr Leu His Leu Ala Ser Thr Tyr Leu  
740 745 750  
Ser His Gln Glu Lys Leu Leu Leu Glu Gly Glu Lys Tyr Leu Gln Ser  
755 760 765  
Lys Glu Asp Leu Arg Leu Met Leu Ile  
770 775

<210> 3609

<211> 274

<212> PRT

<213> Homo sapiens

<400> 3609

Met Leu Glu Asp Ile Ala Ser Pro Arg Pro Pro Ala Glu Gly Phe Ile  
1 5 10 15  
Asp Glu Thr Pro Asn Phe Ile Ile Pro Ala Gln Arg Ala Glu Pro Met  
20 25 30  
Arg Ile Val Arg Gln Pro Thr Pro Pro Pro Gly Asp Leu Glu Pro Pro  
35 40 45  
Phe Gln Pro Ser Ala Leu Pro Ala Asp Pro Leu Glu Ser Pro Pro Thr  
50 55 60  
Ala Pro Asp Pro Ala Leu Glu Leu Pro Ser Thr Pro Pro Pro Ser Ser  
65 70 75 80  
Leu Leu Arg Pro Arg Leu Ser Pro Trp Gly Leu Ala Pro Leu Phe Arg  
85 90 95  
Ser Val Arg Ser Lys Leu Glu Ser Phe Ala Asp Ile Phe Leu Thr Pro  
100 105 110  
Asn Lys Thr Pro Gln Pro Pro Pro Pro Ser Pro Pro Met Lys Leu Glu

115	120	125
Leu Lys Ile Ala Ile Ser Glu Ala Glu Gln Ser Gly Ala Ala Glu Gly		
130	135	140
Thr Ala Ser Val Ser Pro Arg Pro Pro Ile Arg Gln Trp Arg Thr Gln		
145	150	155
Asp His Asn Thr Pro Ala Leu Leu Pro Lys Pro Ser Leu Gly Arg Ser		
165	170	175
Tyr Ser Cys Pro Asp Leu Gly Pro Pro Gly Pro Gly Thr Cys Thr Trp		
180	185	190
Pro Pro Ala Pro Pro Gln Pro Ser Arg Pro Arg Pro Arg Arg His Thr		
195	200	205
Val Gly Gly Gly Glu Met Ala Arg Ala Pro Pro Pro Pro Arg Pro Cys		
210	215	220
Leu Arg Lys Glu Val Phe Pro Leu Gly Gly Val Gly Ala Ser Pro Ser		
225	230	235
Leu Thr Thr Ser Cys Ser Ser Thr Ala Ser Thr Ser Phe Ser Gly Pro		
245	250	255
Ala Glu Pro Arg Glu Gly Ala Lys Ser Leu Lys Gly Pro Gly Ala Phe		
260	265	270
Arg Thr		

&lt;210&gt; 3610

&lt;211&gt; 497

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3610



Met Asp Asn Arg Gln Asn Val Thr Pro Ala Leu Ile Phe Ala Ile Thr  
 1 5 10 15  
 Val Ala Thr Ile Gly Ser Phe Gln Phe Gly Tyr Asn Thr Gly Val Ile  
 20 25 30  
 Asn Ala Pro Glu Thr Ile Ile Lys Glu Phe Ile Asn Lys Thr Leu Thr  
 35 40 45  
 Asp Lys Ala Asn Ala Pro Pro Ser Glu Val Leu Leu Thr Asn Leu Trp  
 50 55 60  
 Ser Leu Ser Val Ala Ile Phe Ser Val Gly Gly Met Ile Gly Ser Phe  
 65 70 75 80  
 Ser Val Gly Leu Phe Val Asn Arg Phe Gly Arg Arg Asn Ser Met Leu  
 85 90 95  
 Ile Val Asn Leu Leu Ala Ala Thr Gly Gly Cys Leu Met Gly Leu Cys  
 100 105 110  
 Lys Ile Ala Glu Ser Val Glu Met Leu Ile Leu Gly Arg Leu Val Ile  
 115 120 125  
 Gly Leu Phe Cys Gly Leu Cys Thr Gly Phe Val Pro Met Tyr Ile Gly  
 130 135 140  
 Glu Ile Ser Pro Thr Ala Leu Arg Gly Ala Phe Gly Thr Leu Asn Gln  
 145 150 155 160  
 Leu Gly Ile Val Ile Gly Ile Leu Val Ala Gln Ile Phe Gly Leu Glu  
 165 170 175  
 Leu Ile Leu Gly Ser Glu Glu Leu Trp Pro Val Leu Leu Gly Phe Thr  
 180 185 190  
 Ile Leu Pro Ala Ile Leu Gln Ser Ala Ala Leu Pro Cys Cys Pro Glu  
 195 200 205  
 Ser Pro Arg Phe Leu Leu Ile Asn Arg Lys Lys Glu Glu Asn Ala Thr  
 210 215 220  
 Arg Ile Leu Gln Arg Leu Trp Gly Thr Gln Asp Val Ser Gln Asp Ile

225                      230                      235                      240  
Gln Glu Met Lys Asp Glu Ser Ala Arg Met Ser Gln Glu Lys Gln Val  
                         245                      250                      255  
Thr Val Leu Glu Leu Phe Arg Val Ser Ser Tyr Arg Gln Pro Ile Ile  
                         260                      265                      270  
Ile Ser Ile Val Leu Gln Leu Ser Gln Gln Leu Ser Gly Ile Asn Ala  
                         275                      280                      285  
Val Phe Tyr Tyr Ser Thr Gly Ile Phe Lys Asp Ala Gly Val Gln Gln  
                         290                      295                      300  
Pro Ile Tyr Ala Thr Ile Ser Ala Gly Val Val Asn Thr Ile Phe Thr  
305                      310                      315                      320  
Leu Leu Ser Leu Phe Leu Val Glu Arg Ala Gly Arg Arg Thr Leu His  
                         325                      330                      335  
Met Ile Gly Leu Gly Gly Met Ala Phe Cys Ser Thr Leu Met Thr Val  
                         340                      345                      350  
Ser Leu Leu Leu Lys Asn His Tyr Asn Gly Met Ser Phe Val Cys Ile  
                         355                      360                      365  
Gly Ala Ile Leu Val Phe Val Ala Cys Phe Glu Ile Gly Pro Gly Pro  
                         370                      375                      380  
Ile Pro Trp Phe Ile Val Ala Glu Leu Phe Ser Gln Gly Pro Arg Pro  
385                      390                      395                      400  
Ala Ala Met Ala Val Ala Gly Cys Ser Asn Trp Thr Ser Asn Phe Leu  
                         405                      410                      415  
Val Gly Leu Leu Phe Pro Ser Ala Ala Tyr Tyr Leu Gly Ala Tyr Val  
                         420                      425                      430  
Phe Ile Ile Phe Thr Gly Phe Leu Ile Thr Phe Leu Ala Phe Thr Phe  
                         435                      440                      445  
Phe Lys Val Pro Glu Thr Arg Gly Arg Thr Phe Glu Asp Ile Thr Arg  
                         450                      455                      460

Ala Phe Glu Gly Gln Ala His Gly Ala Asp Arg Ser Gly Lys Asp Gly  
 465                      470                      475                      480  
 Val Met Gly Met Asn Ser Ile Glu Pro Ala Lys Glu Thr Thr Thr Asn  
                          485                      490                      495  
 Val

<210> 3611

<211> 888

<212> PRT

<213> Homo sapiens

<400> 3611

Met Leu Leu Asn Gly Asp Cys Pro Glu Ser Leu Lys Lys Glu Ala Ala  
       1                      5                      10                      15  
 Ala Ala Glu Pro Pro Arg Glu Asn Gly Leu Asp Glu Ala Gly Pro Gly  
                          20                      25                      30  
 Asp Glu Thr Thr Gly Gln Glu Val Ile Val Ile Gln Asp Thr Gly Phe  
                          35                      40                      45  
 Ser Val Lys Ile Leu Ala Pro Gly Ile Glu Pro Phe Ser Leu Gln Val  
                          50                      55                      60  
 Ser Pro Gln Glu Met Val Gln Glu Ile His Gln Val Leu Met Asp Arg  
       65                      70                      75                      80  
 Glu Asp Thr Cys His Arg Thr Cys Phe Ser Leu His Leu Asp Gly Asn  
                          85                      90                      95  
 Val Leu Asp His Phe Ser Glu Leu Arg Ser Val Glu Gly Leu Gln Glu  
                          100                      105                      110  
 Gly Ser Val Leu Arg Val Val Glu Glu Pro Tyr Thr Val Arg Glu Ala

115	120	125	
Arg Ile His Val	Arg His Val Arg Asp Leu Leu Lys	Ser Leu Asp Pro	
130	135	140	
Ser Asp Ala Phe Asn Gly Val	Asp Cys Asn Ser Leu Ser Phe Leu Ser		
145	150	155	160
Val Phe Thr Asp Gly Asp Leu Gly Asp Ser Gly Lys Arg Lys Lys Gly			
165	170	175	
Leu Glu Met Asp Pro Ile Asp Cys Thr Pro Pro Glu Tyr Ile Leu Pro			
180	185	190	
Gly Ser Arg Glu Arg Pro Leu Cys Pro Leu Gln Pro Gln Asn Arg Asp			
195	200	205	
Trp Lys Pro Leu Gln Cys Leu Lys Val Leu Thr Thr Ser Gly Trp Asn			
210	215	220	
Pro Pro Pro Gly Asn Arg Lys Met His Gly Asp Leu Met Tyr Leu Phe			
225	230	235	240
Val Ile Thr Ala Glu Asp Arg Gln Val Ser Ile Thr Ala Ser Thr Arg			
245	250	255	
Gly Phe Tyr Leu Asn Gln Ser Thr Ala Tyr His Phe Asn Pro Lys Pro			
260	265	270	
Ala Ser Pro Arg Phe Leu Ser His Ser Leu Val Glu Leu Leu Asn Gln			
275	280	285	
Ile Ser Pro Thr Phe Lys Lys Asn Phe Ala Val Leu Gln Lys Lys Arg			
290	295	300	
Val Gln Arg His Pro Phe Glu Arg Ile Ala Thr Pro Phe Gln Val Tyr			
305	310	315	320
Ser Trp Thr Ala Pro Gln Ala Glu His Ala Met Asp Cys Val Arg Ala			
325	330	335	
Glu Asp Ala Tyr Thr Ser Arg Leu Gly Tyr Glu Glu His Ile Pro Gly			
340	345	350	

Gln Thr Arg Asp Trp Asn Glu Glu Leu Gln Thr Thr Arg Glu Leu Pro  
355 360 365  
Arg Lys Asn Leu Pro Glu Arg Leu Leu Arg Glu Arg Ala Ile Phe Lys  
370 375 380  
Val His Ser Asp Phe Thr Ala Ala Ala Thr Arg Gly Ala Met Ala Val  
385 390 395 400  
Ile Asp Gly Asn Val Met Ala Ile Asn Pro Ser Glu Glu Thr Lys Met  
405 410 415  
Gln Met Phe Ile Trp Asn Asn Ile Phe Phe Ser Leu Gly Phe Asp Val  
420 425 430  
Arg Asp His Tyr Lys Asp Phe Gly Gly Asp Val Ala Ala Tyr Val Ala  
435 440 445  
Pro Thr Asn Asp Leu Asn Gly Val Arg Thr Tyr Asn Ala Val Asp Val  
450 455 460  
Glu Gly Leu Tyr Thr Leu Gly Thr Val Val Val Asp Tyr Arg Gly Tyr  
465 470 475 480  
Arg Val Thr Ala Gln Ser Ile Ile Pro Gly Ile Leu Glu Arg Asp Gln  
485 490 495  
Glu Gln Ser Val Ile Tyr Gly Ser Ile Asp Phe Gly Lys Thr Val Val  
500 505 510  
Ser His Pro Arg Tyr Leu Glu Leu Leu Glu Arg Thr Ser Arg Pro Leu  
515 520 525  
Lys Ile Leu Arg His Gln Val Leu Asn Asp Arg Asp Glu Glu Val Glu  
530 535 540  
Leu Cys Ser Ser Val Glu Cys Lys Gly Ile Ile Gly Asn Asp Gly Arg  
545 550 555 560  
His Tyr Ile Leu Asp Leu Leu Arg Thr Phe Pro Pro Asp Leu Asn Phe  
565 570 575  
Leu Pro Val Pro Gly Glu Glu Leu Pro Glu Glu Cys Ala Arg Ala Gly

580	585	590
Phe Pro Arg Ala His Arg His Lys Leu Cys Cys Leu Arg Gln Glu Leu		
595	600	605
Val Gly Ala Phe Val Glu His Arg Tyr Leu Leu Phe Met Lys Leu Ala		
610	615	620
Ala Leu Gln Leu Met Gln Gln Asn Ala Ser Gln Leu Glu Thr Pro Ser		
625	630	635
Ser Leu Glu Asn Gly Gly Pro Ser Ser Leu Glu Ser Lys Ser Glu Asp		
645	650	655
Pro Pro Gly Gln Glu Ala Gly Ser Glu Glu Glu Gly Ser Ser Ala Ser		
660	665	670
Gly Leu Ala Lys Val Lys Glu Leu Ala Glu Thr Ile Ala Ala Asp Asp		
675	680	685
Gly Thr Asp Pro Arg Ser Arg Glu Val Ile Arg Asn Ala Cys Lys Ala		
690	695	700
Val Gly Ser Ile Ser Ser Thr Ala Phe Asp Ile Arg Phe Asn Pro Asp		
705	710	715
Ile Phe Ser Pro Gly Val Arg Phe Pro Glu Ser Cys Gln Asp Glu Val		
725	730	735
Arg Asp Gln Lys Gln Leu Leu Lys Asp Ala Ala Ala Phe Leu Leu Ser		
740	745	750
Cys Gln Ile Pro Gly Leu Val Lys Asp Cys Met Glu His Ala Val Leu		
755	760	765
Pro Val Asp Gly Ala Thr Leu Ala Glu Val Met Arg Gln Arg Gly Ile		
770	775	780
Asn Met Arg Tyr Leu Gly Lys Val Leu Glu Leu Val Leu Arg Ser Pro		
785	790	795
Ala Arg His Gln Leu Asp His Val Phe Lys Ile Gly Ile Gly Glu Leu		
805	810	815

Ile Thr Arg Ser Ala Lys His Ile Phe Lys Thr Tyr Leu Gln Gly Val  
                     820                    825                    830  
 Glu Leu Ser Gly Leu Ser Ala Ala Ile Ser His Phe Leu Asn Cys Phe  
                     835                    840                    845  
 Leu Ser Ser Tyr Pro Asn Pro Val Ala His Leu Pro Ala Asp Glu Leu  
                     850                    855                    860  
 Val Ser Lys Glu Arg Asn Lys Arg Arg Lys Thr Gly Pro Arg Gly Leu  
                     865                    870                    875                    880  
 Gln Ile Thr Gln Pro Gly Leu Ser  
                     885

<210> 3612

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3612

Met Arg Asp Thr Gly Ser Cys Leu Ser Leu Asn Ile Pro Pro Ala Gly  
           1                    5                    10                    15  
 Gly His Lys Gly Ala Asp Ala Ala Asp Val Ser Ser Gly Ala Met Gly  
                     20                    25                    30  
 His Arg His Pro Ala Gly Ser Glu Ala Ala Glu Ser Pro Gly Val Thr  
                     35                    40                    45  
 Phe Pro Ala Gly Thr Arg Asn Thr Gly Ser Cys Thr Phe Pro Leu Ser  
                     50                    55                    60  
 Arg Arg Arg Trp Val Ile Thr Gly Phe Thr Ser Phe Pro Leu Gln Met  
                     65                    70                    75                    80  
 Pro Asp Gly Pro Gly Met Thr Ala Ala Ser Gly Lys Leu Tyr Gln Phe

85 90 95  
 Arg His Pro Val Arg  
 100

<210> 3613

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3613

Met Val Leu Leu Leu Leu Ser Leu Asp Phe Trp Ser Val Lys Asn Val  
 1 5 10 15  
 Thr Gly Arg Leu Leu Val Gly Leu Arg Trp Trp Asn Gln Ile Asp Glu  
 20 25 30  
 Asp Gly Lys Ser His Trp Ile Phe Glu Ala Arg Lys Val Ser Pro Asn  
 35 40 45  
 Ser Ile Ala Ala Thr Glu Ala Glu Ala Arg Ile Phe Trp Leu Gly Leu  
 50 55 60  
 Ile Ile Cys Pro Met Ile Trp Ile Val Phe Phe Phe Ser Thr Leu Phe  
 65 70 75 80  
 Ser Leu Lys Leu Lys Trp Leu Ala Leu Val Val Ala Gly Ile Ser Leu  
 85 90 95  
 Gln Ala Ala Asn Leu Tyr Gly Tyr Ile Leu Cys Lys Met Gly Gly Asn  
 100 105 110  
 Ser Asp Ile Gly Lys Val Thr Ala Ser Phe Leu Ser Gln Thr Val Phe  
 115 120 125  
 Gln Thr Ala Cys Pro Gly Asp Phe Gln Lys Pro Gly Leu Glu Gly Leu  
 130 135 140



Glu Ile His Gln His

145

<210> 3614

<211> 626

<212> PRT

<213> Homo sapiens

<400> 3614

Met Pro His Ile Gly Asp Trp Trp Glu Ala Val Ser Glu Thr Val Arg

1 5 10 15

Ala Thr Phe Leu Thr Leu Leu Gln Asp Ile Pro Ser Phe Ser Pro Ile

20 25 30

Phe Leu Leu Ser Thr Ser Glu Thr Met Tyr Ser Glu Leu Pro Glu Glu

35 40 45

Val Lys Cys Ile Phe Arg Ile Gln Tyr Glu Glu Val Leu Tyr Ile Gln

50 55 60

Arg Pro Ile Glu Glu Asp Arg Arg Lys Phe Phe Gln Glu Leu Ile Leu

65 70 75 80

Asn Gln Ala Ser Met Ala Pro Pro Arg Arg Lys His Ala Ala Leu Cys

85 90 95

Ala Met Glu Val Leu Pro Leu Ala Leu Pro Ser Pro Pro Arg Gln Leu

100 105 110

Ser Glu Ser Glu Lys Ser Arg Met Glu Asp Gln Glu Glu Asn Thr Leu

115 120 125

Arg Glu Leu Arg Leu Phe Leu Arg Asp Val Thr Lys Arg Leu Ala Thr

130 135 140

Asp Lys Arg Phe Asn Ile Phe Ser Lys Pro Val Asp Ile Glu Glu Val

145                      150                      155                      160  
Ser Asp Tyr Leu Glu Val Ile Lys Glu Pro Met Asp Leu Ser Thr Val  
                         165                      170                      175  
Ile Thr Lys Ile Asp Lys His Asn Tyr Leu Thr Ala Lys Asp Phe Leu  
                         180                      185                      190  
Lys Asp Ile Asp Leu Ile Cys Ser Asn Ala Leu Glu Tyr Asn Pro Asp  
                         195                      200                      205  
Lys Asp Pro Gly Asp Lys Ile Ile Arg His Arg Ala Cys Thr Leu Lys  
                         210                      215                      220  
Asp Thr Ala His Ala Ile Ile Ala Ala Glu Leu Asp Pro Glu Phe Asn  
225                      230                      235                      240  
Lys Leu Cys Glu Glu Ile Lys Glu Ala Arg Ile Lys Arg Gly Leu Ser  
                         245                      250                      255  
Val Thr Ser Glu Gln Ile Asn Pro His Ser Thr Gly Ala Arg Lys Thr  
                         260                      265                      270  
Glu Thr Arg Val Glu Glu Ala Phe Arg His Lys Gln Arg Asn Pro Met  
                         275                      280                      285  
Asp Val Trp His Asn Ser Ala Asn Lys Cys Ala Phe Arg Val Arg Arg  
                         290                      295                      300  
Lys Ser Arg Arg Arg Ser Gln Trp Gly Lys Gly Ile Ile Lys Lys Arg  
305                      310                      315                      320  
Lys Val Asn Asn Leu Lys Lys Asp Glu Glu Asp Thr Lys Phe Ala Asp  
                         325                      330                      335  
Tyr Glu Asn His Thr Glu Asp Arg Lys Leu Leu Glu Asn Gly Glu Phe  
                         340                      345                      350  
Glu Val Ser Thr Asp Cys His Glu Glu Asn Gly Glu Glu Thr Gly Asp  
                         355                      360                      365  
Leu Ser Met Thr Asn Asp Glu Ser Ser Cys Asp Ile Met Asp Leu Asp  
                         370                      375                      380

Gln Gly Gln Arg Leu Asn Asn Gly Ala Gly Thr Lys Glu Asn Phe Ala  
 385 390 395 400  
 Ser Thr Glu Glu Glu Ser Ser Asn Glu Ser Leu Leu Val Asn Ser Ser  
 405 410 415  
 Ser Ser Leu Asn Pro Glu Gln Thr Ser Arg Lys Glu Thr Phe Leu Lys  
 420 425 430  
 Gly Asn Cys Leu Asn Gly Glu Ala Ser Thr Asp Ser Phe Glu Gly Ile  
 435 440 445  
 Pro Val Leu Glu Cys Gln Asn Gly Lys Leu Glu Val Val Ser Phe Cys  
 450 455 460  
 Asp Ser Gly Asp Lys Cys Ser Ser Glu Gln Lys Ile Leu Leu Glu Asp  
 465 470 475 480  
 Gln Ser Lys Glu Lys Pro Glu Thr Ser Thr Glu Asn His Gly Asp Asp  
 485 490 495  
 Leu Glu Lys Leu Glu Ala Leu Glu Cys Ser Asn Asn Glu Lys Leu Glu  
 500 505 510  
 Pro Gly Ser Asp Val Glu Val Lys Asp Ala Glu Leu Asp Lys Glu Gly  
 515 520 525  
 Ala Ser Lys Val Lys Lys Tyr Arg Lys Leu Ile Leu Glu Gln Ala Lys  
 530 535 540  
 Thr Thr Ser Leu Glu Leu Val Pro Glu Glu Pro Ser Glu Pro Val Pro  
 545 550 555 560  
 Pro Leu Ile Val Asp Arg Glu Arg Leu Lys Lys Leu Leu Asp Leu Leu  
 565 570 575  
 Val Asp Lys Ser Asn Asn Leu Ala Val Asp Gln Leu Glu Arg Leu Tyr  
 580 585 590  
 Ser Leu Leu Ser Gln Cys Ile Tyr Arg His Arg Lys Asp Tyr Asp Lys  
 595 600 605  
 Ser Gln Leu Val Glu Glu Met Glu Arg Thr Val His Met Phe Glu Thr

<210> 3615  
<211> 131  
<212> PRT  
<213> Homo sapiens

出証特 2 0 0 4 - 3 0 5 9 6 6 0

&lt;210&gt; 3616

&lt;211&gt; 929

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3616

Met Thr Ala Ser Ser Val Glu Gln Leu Arg Lys Glu Gly Asn Glu Leu

1 5 10 15

Phe Lys Cys Gly Asp Tyr Gly Gly Ala Leu Ala Ala Tyr Thr Gln Ala

20 25 30

Leu Gly Leu Asp Ala Thr Pro Gln Asp Gln Ala Val Leu His Arg Asn

35 40 45

Arg Ala Ala Cys His Leu Lys Leu Glu Asp Tyr Asp Lys Ala Glu Thr

50 55 60

Glu Ala Ser Lys Ala Ile Glu Lys Asp Gly Gly Asp Val Lys Ala Leu

65 70 75 80

Tyr Arg Arg Ser Gln Ala Leu Glu Lys Leu Gly Arg Leu Asp Gln Ala

85 90 95

Val Leu Asp Leu Gln Arg Cys Val Ser Leu Glu Pro Lys Asn Lys Val

100 105 110

Phe Gln Glu Ala Leu Arg Asn Ile Gly Gly Gln Ile Gln Glu Lys Val

115 120 125

Arg Tyr Met Ser Ser Thr Asp Ala Lys Val Glu Gln Met Phe Gln Ile

130 135 140

Leu Leu Asp Pro Glu Glu Lys Gly Thr Glu Lys Lys Gln Lys Ala Ser

145 150 155 160

Gln Asn Leu Val Val Leu Ala Arg Glu Asp Ala Gly Ala Glu Lys Ile

165 170 175  
Phe Arg Ser Asn Gly Val Gln Leu Leu Gln Arg Leu Leu Asp Met Gly  
180 185 190  
Glu Thr Asp Leu Met Leu Ala Ala Leu Arg Thr Leu Val Gly Ile Cys  
195 200 205  
Ser Glu His Gln Ser Arg Thr Val Ala Thr Leu Ser Ile Leu Gly Thr  
210 215 220  
Arg Arg Val Val Ser Ile Leu Gly Val Glu Ser Gln Ala Val Ser Leu  
225 230 235 240  
Ala Ala Cys His Leu Leu Gln Val Met Phe Asp Ala Leu Lys Glu Gly  
245 250 255  
Val Lys Lys Gly Phe Arg Gly Lys Glu Gly Ala Ile Ile Val Asp Pro  
260 265 270  
Ala Arg Glu Leu Lys Val Leu Ile Ser Asn Leu Leu Asp Leu Leu Thr  
275 280 285  
Glu Val Gly Val Ser Gly Gln Gly Arg Asp Asn Ala Leu Thr Leu Leu  
290 295 300  
Ile Lys Ala Val Pro Arg Lys Ser Leu Lys Asp Pro Asn Asn Ser Leu  
305 310 315 320  
Thr Leu Trp Val Ile Asp Gln Gly Leu Lys Lys Ile Leu Glu Val Gly  
325 330 335  
Gly Ser Leu Gln Asp Pro Pro Gly Glu Leu Ala Val Thr Ala Asn Ser  
340 345 350  
Arg Met Ser Ala Ser Ile Leu Leu Ser Lys Leu Phe Asp Asp Leu Lys  
355 360 365  
Cys Asp Ala Glu Arg Glu Asn Phe His Arg Leu Cys Glu Asn Tyr Ile  
370 375 380  
Lys Ser Trp Phe Glu Gly Gln Gly Leu Ala Gly Lys Leu Arg Ala Ile  
385 390 395 400

Gln Thr Val Ser Cys Leu Leu Gln Gly Pro Cys Asp Ala Gly Asn Arg			
405	410	415	
Ala Leu Glu Leu Ser Gly Val Met Glu Ser Val Ile Ala Leu Cys Ala			
420	425	430	
Ser Glu Gln Glu Glu Glu Gln Leu Val Ala Val Glu Ala Leu Ile His			
435	440	445	
Ala Ala Gly Lys Ala Lys Arg Ala Ser Phe Ile Thr Ala Asn Gly Val			
450	455	460	
Ser Leu Leu Lys Asp Leu Tyr Lys Cys Ser Glu Lys Asp Ser Ile Arg			
465	470	475	480
Ile Arg Ala Leu Val Gly Leu Cys Lys Leu Gly Ser Ala Gly Gly Thr			
485	490	495	
Asp Phe Ser Met Lys Gln Phe Ala Glu Gly Ser Thr Leu Lys Leu Ala			
500	505	510	
Lys Gln Cys Arg Lys Trp Leu Cys Asn Asp Gln Ile Asp Ala Gly Thr			
515	520	525	
Arg Arg Trp Ala Val Glu Gly Leu Ala Tyr Leu Thr Phe Asp Ala Asp			
530	535	540	
Val Lys Glu Glu Phe Val Glu Asp Ala Ala Ala Leu Lys Ala Leu Phe			
545	550	555	560
Gln Leu Ser Arg Leu Glu Glu Arg Ser Val Leu Phe Ala Val Ala Ser			
565	570	575	
Ala Leu Val Asn Cys Thr Asn Ser Tyr Asp Tyr Glu Glu Pro Asp Pro			
580	585	590	
Lys Met Val Glu Leu Ala Lys Tyr Ala Lys Gln His Val Pro Glu Gln			
595	600	605	
His Pro Lys Asp Lys Pro Ser Phe Val Arg Ala Arg Val Lys Lys Leu			
610	615	620	
Leu Ala Ala Gly Val Val Ser Ala Met Val Cys Met Val Lys Thr Glu			

625                      630                      635                      640  
Ser Pro Val Leu Thr Ser Ser Cys Arg Glu Leu Leu Ser Arg Val Phe  
                         645                      650                      655  
Leu Ala Leu Val Glu Glu Val Glu Asp Arg Gly Thr Val Val Ala Gln  
                         660                      665                      670  
Gly Gly Gly Arg Ala Leu Ile Pro Leu Ala Leu Glu Gly Thr Asp Val  
                         675                      680                      685  
Gly Gln Thr Lys Ala Ala Gln Ala Leu Ala Lys Leu Thr Ile Thr Ser  
                         690                      695                      700  
Asn Pro Glu Met Thr Phe Pro Gly Glu Arg Ile Tyr Glu Val Val Arg  
705                      710                      715                      720  
Pro Leu Val Ser Leu Leu His Leu Asn Cys Ser Gly Leu Gln Asn Phe  
                         725                      730                      735  
Glu Ala Leu Met Ala Leu Thr Asn Leu Ala Gly Ile Ser Glu Arg Leu  
                         740                      745                      750  
Arg Gln Lys Ile Leu Lys Glu Lys Ala Val Pro Met Ile Glu Gly Tyr  
                         755                      760                      765  
Met Phe Glu Glu His Glu Met Ile Arg Arg Ala Ala Thr Glu Cys Met  
                         770                      775                      780  
Cys Asn Leu Ala Met Ser Lys Glu Val Gln Asp Leu Phe Glu Ala Gln  
785                      790                      795                      800  
Gly Asn Asp Arg Leu Lys Leu Leu Val Leu Tyr Ser Gly Glu Asp Asp  
                         805                      810                      815  
Glu Leu Leu Gln Arg Ala Ala Ala Gly Gly Leu Ala Met Leu Thr Ser  
                         820                      825                      830  
Met Arg Pro Thr Leu Cys Ser Arg Ile Pro Gln Val Thr Thr His Trp  
                         835                      840                      845  
Leu Glu Ile Leu Gln Ala Leu Leu Leu Ser Ser Asn Gln Glu Leu Gln  
                         850                      855                      860



His Arg Gly Ala Val Val Val Leu Asn Met Val Glu Ala Ser Arg Glu  
 865                      870                      875                      880  
 Ile Ala Ser Thr Leu Met Glu Ser Glu Met Met Glu Ile Leu Ser Val  
                     885                      890                      895  
 Leu Ala Lys Gly Asp His Ser Pro Val Thr Arg Ala Ala Ala Ala Cys  
                     900                      905                      910  
 Leu Asp Lys Ala Val Glu Tyr Gly Leu Ile Gln Pro Asn Gln Asp Gly  
                     915                      920                      925  
 Glu

<210> 3617

<211> 527

<212> PRT

<213> Homo sapiens

<400> 3617

Met Glu Cys Leu Cys Ala His Pro Pro Ala Gly Leu Gln His Leu Gly  
     1                      5                      10                      15  
 Leu Gly His Asn Lys Leu Leu Gly Pro Leu Glu Ser Leu Tyr Val Thr  
                     20                      25                      30  
 Ala Asn His Trp Gly Arg Val Arg Leu Gly Leu Gly Asp Ala Val Leu  
                     35                      40                      45  
 Thr Ala Ala Ala Cys Val Phe Leu Leu Phe Ser Glu Leu Arg Ser Ile  
                     50                      55                      60  
 Cys Phe Leu Val Cys Gly Ser Arg Leu Leu Ala Pro Cys Ser Pro Gly  
                     65                      70                      75                      80  
 Phe Leu Thr Pro Arg Arg Ser Cys Ser Pro Ser Arg Pro Asn Leu Val

85	90	95
Ser Leu Asp Leu Gly Phe Asn Asp Leu Thr Asp Leu Gln Ser Met Val		
100	105	110
Thr Ser Leu Arg Thr Leu Arg His Leu Arg Leu Leu Val Leu Lys Gly		
115	120	125
Asn Pro Leu Ala Leu Val Pro Tyr Tyr Arg Gly Leu Thr Ile Asp Ser		
130	135	140
Leu Ala Gln Leu Cys Val Leu Asp Asp Ile Thr Val Ser Pro Asn Glu		
145	150	155
160		
Lys His Leu Phe Arg Gly Leu Ser Leu Asn Gly Asp Leu Leu Ala Gln		
165	170	175
Glu Ala Gln Phe Val Val Thr Ile Gly Asn Ile Arg Gly Val Leu Asp		
180	185	190
Thr Ser Val Leu Asp Pro Glu Pro Arg Pro Glu Gly Pro Phe Ile Thr		
195	200	205
Tyr Asn Tyr Tyr Val Thr Tyr Asp Phe Val Lys Asp Glu Glu Gly Glu		
210	215	220
Met Asn Glu Ser Ala Gly Val Leu Ala Glu Ile Val Lys Pro Ser Pro		
225	230	235
240		
Ser Leu Glu Leu Leu Val Glu Glu Ser Pro Glu Glu Val Val Glu Asp		
245	250	255
Val Ile Glu Asp Ile Val Glu Glu Val Thr Glu Glu Val Glu Gly Ser		
260	265	270
Leu Glu Ser Glu Val Glu Glu Ser Gly Glu Ser Glu Leu Ser Val Ile		
275	280	285
Ser Gly Pro Ser Thr Ile Leu Gln Met Pro Arg Ala Ser Ala Glu Glu		
290	295	300
Leu Ala Lys Leu Arg Leu Arg Ile Asp Pro Arg Leu Cys Pro Ser Pro		
305	310	315
320		

<210> 3618

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3618

Met Arg Lys Ala Tyr Ser Pro Leu Gln Val Leu Arg Gly Cys Leu Leu

1 5 10 15

Leu Pro Ser Leu Leu His Ala Leu Ser Leu Gln Glu Gln Pro Met Val

20 25 30

Trp Pro Leu Thr Arg Gly Pro Ser Ser Ala Ser Asp Ala Leu Ser Ser

35 40 45

Gly Gly Pro Tyr His Pro Ser Glu Cys Cys Phe Thr Tyr Thr Thr Tyr

50 55 60

Lys Ile Pro Arg Gln Arg Ile Met Asp Tyr Tyr Glu Thr Asn Ser Gln

65 70 75 80

Cys Ser Lys Pro Gly Ile Val Phe Ile Thr Lys Arg Gly His Ser Val

85 90 95

Cys Thr Asn Pro Ser Asp Lys Trp Val Gln Asp Tyr Ile Lys Asp Met

100 105 110

Lys Glu Asn

115

&lt;210&gt; 3619

&lt;211&gt; 528

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3619

Met Ala Ala Tyr Gln Gln Glu Glu Gln Met Gln Leu Pro Arg Ala Asp  
1 5 10 15  
Ala Ile Arg Ser Arg Leu Ile Asp Thr Phe Ser Leu Ile Glu His Leu  
20 25 30  
Gln Gly Leu Ser Gln Ala Val Pro Arg His Thr Ile Arg Glu Leu Leu  
35 40 45  
Asp Pro Ser Arg Gln Lys Lys Leu Ile Leu Gly Asp Gln His Gln Leu  
50 55 60  
Val Arg Phe Ser Ile Lys Pro Gln Arg Ile Glu Gln Ile Ser His Ala  
65 70 75 80  
Gln Arg Leu Leu Ser Arg Leu His Val Arg Cys Ser Gln Arg Pro Pro  
85 90 95  
Leu Ser Leu Trp Ala Gly Trp Val Leu Glu Cys Pro Leu Phe Lys Asn  
100 105 110  
Phe Ile Ile Phe Leu Val Phe Leu Asn Thr Ile Ile Leu Met Val Glu  
115 120 125  
Ile Glu Leu Leu Glu Ser Thr Asn Thr Lys Leu Trp Pro Leu Lys Leu  
130 135 140  
Thr Leu Glu Val Ala Ala Trp Phe Ile Leu Leu Ile Phe Ile Leu Glu  
145 150 155 160  
Ile Leu Leu Lys Trp Leu Ser Asn Phe Ser Val Phe Trp Lys Ser Ala  
165 170 175  
Trp Asn Val Phe Asp Phe Val Val Thr Met Leu Ser Leu Leu Pro Glu  
180 185 190  
Val Val Val Leu Val Gly Val Thr Gly Gln Ser Val Trp Leu Gln Leu  
195 200 205  
Leu Arg Ile Cys Arg Val Leu Arg Ser Leu Lys Leu Leu Ala Gln Phe  
210 215 220  
Arg Gln Ile Gln Ile Ile Ile Leu Val Leu Val Arg Ala Leu Lys Ser

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Arg Leu Asp Trp Glu Thr Leu Val His Glu Asn Leu Pro Gly Leu Met  
 465                      470                      475                      480  
 Glu Met Asp Gln Asp Asp Arg Val Trp Pro Arg Asp Ser Leu Phe Arg  
                          485                      490                      495  
 Tyr Phe Glu Leu Leu Glu Lys Leu Gln Tyr Asn Leu Glu Glu Arg Lys  
                          500                      505                      510  
 Lys Leu Gln Glu Phe Ala Val Gln Ala Leu Met Asn Leu Glu Asp Lys  
                          515                      520                      525

<210> 3620

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3620

Met Phe Arg Leu Trp Leu Leu Leu Ala Gly Leu Cys Gly Leu Leu Ala  
 1                      5                      10                      15  
 Ser Arg Pro Gly Phe Gln Asn Ser Leu Leu Gln Ile Val Ile Pro Glu  
                          20                      25                      30  
 Lys Ile Gln Thr Asn Thr Asn Asp Ser Ser Glu Ile Glu Tyr Glu Gln  
                          35                      40                      45  
 Ile Ser Tyr Ile Ile Pro Ile Asp Glu Lys Leu Tyr Thr Val His Leu  
                          50                      55                      60  
 Lys Gln Arg Tyr Phe Leu Ala Asp Asn Phe Met Ile Tyr Leu Tyr Asn  
 65                      70                      75                      80  
 Gln Gly Ser Met Asn Thr Tyr Ser Ser Asp Ile Gln Thr Gln Cys Tyr  
                          85                      90                      95  
 Tyr Gln Gly Asn Ile Glu Gly Tyr Pro Asp Ser Met Val Thr Leu Ser

100	105	110
Thr Cys Ser Gly Leu Arg Gly Ile Leu Gln Phe Glu Asn Val Ser Tyr		
115	120	125
Gly Ile Glu Pro Leu Glu Ser Ala Val Glu Phe Gln His Val Leu Tyr		
130	135	140
Lys Leu Lys Asn Glu Asp Asn Asp Ile Ala Ile Phe Ile Asp Arg Ser		
145	150	155
Leu Lys Glu Gln Pro Met Asp Asp Asn Ile Phe Ile Ser Glu Lys Ser		
165	170	175
Glu Pro Ala Val Pro Asp Leu Phe Pro Leu Tyr Leu Glu Met His Ile		
180	185	190
Val Val Asp Lys Thr Leu Tyr Asp Tyr Trp Gly Ser Asp Ser Met Ile		
195	200	205
Val Thr Asn Lys Val Ile Glu Ile Val Gly Leu Ala Asn Ser Met Phe		
210	215	220
Thr Gln Phe Lys Val Thr Ile Val Leu Ser Ser Leu Glu Leu Trp Ser		
225	230	235
Asp Glu Asn Lys Ile Ser Thr Val Gly Glu Ala Asp Trp Arg Glu Met		
245	250	255
Lys Ser Val Ile Val Val Leu Arg Leu Asn Val Asp Leu Gln Ala Val		
260	265	270
Val Ile Phe Glu Leu Val Tyr		
275		

&lt;210&gt; 3621

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 3621

Met Ile Ser Val Val Leu Cys Trp Glu Glu Glu Thr Ala Gly Asn His  
 1 5 10 15  
 Arg Lys Leu Val Gln Gly Ala Pro Met Lys Lys Ser Gln Ala Arg Leu  
 20 25 30  
 Leu Arg Arg Arg Gly Pro Gly Asn Pro Thr Pro Gly Phe Pro Leu Gly  
 35 40 45  
 Val Gly Gln Ser Gln Leu Gln Asp Pro Ala Thr Ala Ala Arg Phe Pro  
 50 55 60  
 Glu Cys Trp Arg Ser Pro Leu Arg Gly Arg Gly Arg Ala Leu Ser Ser  
 65 70 75 80  
 Arg Thr Arg Ala Pro Pro Pro Arg Pro Gly Pro Leu Thr Val Glu Ala  
 85 90 95  
 Phe His Leu Trp Leu Leu Ala Leu Gly Leu Leu Leu Gln Pro Leu Gly  
 100 105 110  
 Phe Ala Ala Leu Leu Ala Val Glu His Glu Ala Gln His Gly Asn Asp  
 115 120 125  
 Val Gly His Ser Gly Thr His Arg Gln Pro Asn Gly Leu Asp His Leu  
 130 135 140  
 Val Gly Gly Arg Ala Ala Arg Ala Leu Arg Leu Leu Arg His Arg Leu  
 145 150 155 160  
 Val

&lt;210&gt; 3622

&lt;211&gt; 514

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3622

Met	Gly	Asp	Trp	Asn	Leu	Leu	Gly	Asp	Thr	Leu	Glu	Glu	Val	His	Ile
1				5					10					15	
His	Ser	Thr	Met	Ile	Gly	Lys	Ile	Trp	Leu	Thr	Ile	Leu	Phe	Ile	Phe
				20				25					30		
Arg	Met	Leu	Val	Leu	Gly	Val	Ala	Ala	Glu	Asp	Val	Trp	Asn	Asp	Glu
				35				40					45		
Gln	Ser	Gly	Phe	Ile	Cys	Asn	Thr	Glu	Gln	Pro	Gly	Cys	Arg	Asn	Val
				50				55					60		
Cys	Tyr	Asp	Gln	Ala	Phe	Pro	Ile	Ser	Leu	Ile	Arg	Tyr	Trp	Val	Leu
				65				70					75		80
Gln	Val	Ile	Phe	Val	Ser	Ser	Pro	Ser	Leu	Val	Tyr	Met	Gly	His	Ala
				85				90					95		
Leu	Tyr	Arg	Leu	Arg	Val	Leu	Glu	Glu	Glu	Arg	Gln	Arg	Met	Lys	Ala
				100				105					110		
Gln	Leu	Arg	Val	Glu	Leu	Glu	Glu	Val	Glu	Phe	Glu	Met	Pro	Arg	Asp
				115				120					125		
Arg	Arg	Arg	Leu	Glu	Gln	Glu	Leu	Cys	Gln	Leu	Glu	Lys	Arg	Lys	Leu
				130				135					140		
Asn	Lys	Ala	Pro	Leu	Arg	Gly	Thr	Leu	Leu	Cys	Thr	Tyr	Val	Ile	His
				145				150					155		160
Ile	Phe	Thr	Arg	Ser	Val	Val	Glu	Val	Gly	Phe	Met	Ile	Gly	Gln	Tyr
				165				170					175		
Leu	Leu	Tyr	Gly	Phe	His	Leu	Glu	Pro	Leu	Phe	Lys	Cys	His	Gly	His
				180				185					190		
Pro	Cys	Pro	Asn	Ile	Ile	Asp	Cys	Phe	Val	Ser	Arg	Pro	Thr	Glu	Lys
				195				200					205		

Thr Ile Phe Leu Leu Phe Met Gln Ser Ile Ala Thr Ile Ser Leu Phe  
 210 215 220  
 Leu Asn Ile Leu Glu Ile Phe His Leu Gly Phe Lys Lys Ile Lys Arg  
 225 230 235 240  
 Gly Leu Trp Gly Lys Tyr Lys Leu Lys Lys Glu His Asn Glu Phe His  
 245 250 255  
 Ala Asn Lys Ala Lys Gln Asn Val Ala Lys Tyr Gln Ser Thr Ser Ala  
 260 265 270  
 Asn Ser Leu Lys Arg Leu Pro Ser Ala Pro Asp Tyr Asn Leu Leu Val  
 275 280 285  
 Glu Lys Gln Thr His Thr Ala Val Tyr Pro Ser Leu Asn Ser Ser Ser  
 290 295 300  
 Val Phe Gln Pro Asn Pro Asp Asn His Ser Val Asn Asp Glu Lys Cys  
 305 310 315 320  
 Ile Leu Asp Glu Gln Glu Thr Val Leu Ser Asn Glu Ile Ser Thr Leu  
 325 330 335  
 Ser Thr Ser Cys Ser His Phe Gln His Ile Ser Ser Asn Asn Asn Lys  
 340 345 350  
 Asp Thr His Lys Ile Phe Gly Lys Glu Leu Asn Gly Asn Gln Leu Met  
 355 360 365  
 Glu Lys Arg Glu Thr Glu Gly Lys Asp Ser Lys Arg Asn Tyr Tyr Ser  
 370 375 380  
 Arg Gly His Arg Ser Ile Pro Gly Val Ala Ile Asp Gly Glu Asn Asn  
 385 390 395 400  
 Met Arg Gln Ser Pro Gln Thr Val Phe Ser Leu Pro Ala Asn Cys Asp  
 405 410 415  
 Trp Lys Pro Arg Trp Leu Arg Ala Thr Trp Gly Ser Ser Thr Glu His  
 420 425 430  
 Glu Asn Arg Gly Ser Pro Pro Lys Val Pro Gly Ser Lys Ala Thr Ala

435                      440                      445  
 Ser Ser Leu Leu Leu Ile Leu Gln Arg Pro Thr Ser Ser Gln Pro Arg  
 450                      455                      460  
 Leu Lys Glu Thr Pro Lys Ile Lys Ala Glu Ala Lys Ile Tyr Asp Ser  
 465                      470                      475                      480  
 Lys His Pro Pro Gln Leu Leu Gln Ser Thr Val Ser Thr Phe Ser Gly  
 485                      490                      495  
 Arg Glu Pro Arg Ser Pro Ala Pro Met Gly His His Ser Phe Arg Gly  
 500                      505                      510  
 Pro Arg

<210> 3623

<211> 345

<212> PRT

<213> Homo sapiens

<400> 3623

Met Ser Glu Asn Glu Leu Asp Thr Thr Leu His Leu Lys Cys Lys Leu  
 1                      5                      10                      15  
 Gly Met Lys Ser Ile Leu Pro Ile Phe Arg Cys Leu Asn Ser Leu Glu  
 20                      25                      30  
 Arg Asn Ile Glu Lys Cys Arg Ile Phe Thr Arg Ser Asp Lys Cys Lys  
 35                      40                      45  
 Val Val Ile Gln Phe Phe Tyr Arg His Gly Ile Lys Arg Thr His Asn  
 50                      55                      60  
 Ile Cys Phe Gln Glu Ser Gln Pro Leu Gln Val Ile Phe Asp Lys Asn  
 65                      70                      75                      80

Val Cys Thr Asn Thr Leu Met Ile Gln Pro Arg Leu Leu Ala Asp Ala  
85 90 95  
Ile Val Leu Phe Thr Ser Ser Gln Glu Glu Val Thr Leu Ala Val Thr  
100 105 110  
Pro Leu Asn Phe Cys Leu Lys Ser Ser Asn Glu Glu Ser Met Asp Leu  
115 120 125  
Ser Asn Ala Val His Ser Glu Met Phe Val Gly Ser Asp Glu Phe Asp  
130 135 140  
Phe Phe Gln Ile Gly Met Asp Thr Glu Ile Thr Phe Cys Phe Lys Glu  
145 150 155 160  
Leu Lys Gly Ile Leu Thr Phe Ser Glu Ala Thr His Ala Pro Ile Ser  
165 170 175  
Ile Tyr Phe Asp Phe Pro Gly Lys Pro Leu Ala Leu Ser Ile Asp Asp  
180 185 190  
Met Leu Val Glu Ala Asn Phe Ile Leu Ala Thr Leu Ala Asp Glu Gln  
195 200 205  
Ser Arg Ala Ser Ser Pro Gln Ser Leu Cys Leu Ser Gln Lys Arg Lys  
210 215 220  
Arg Ser Asp Leu Ile Glu Lys Lys Ala Gly Lys Asn Val Thr Gly Gln  
225 230 235 240  
Ala Leu Glu Cys Ile Ser Lys Lys Ala Ala Pro Arg Arg Leu Tyr Pro  
245 250 255  
Lys Glu Thr Leu Thr Asn Ile Ser Ala Leu Glu Asn Cys Gly Ser Pro  
260 265 270  
Ala Met Lys Arg Val Asp Gly Asp Val Ser Glu Val Ser Glu Ser Ser  
275 280 285  
Val Ser Asn Thr Glu Glu Val Pro Gly Ser Leu Cys Leu Arg Lys Phe  
290 295 300  
Ser Cys Met Phe Phe Gly Ala Val Ser Ser Asp Gln Gln Glu His Phe

305                      310                      315                      320  
Asn His Pro Phe Asp Ser Leu Ala Arg Ala Ser Asp Ser Glu Glu Asp  
                         325                      330                      335  
Met Asn Asn Gly Ser Phe Ser Ile Phe  
                         340                      345

<210> 3624

<211> 718

<212> PRT

<213> Homo sapiens

<400> 3624

Met Val Gly Lys Ser Gln Gln Thr Asp Val Ile Glu Lys Lys Lys His  
1                      5                      10                      15  
Met Ala Ile Pro Lys Ser Ser Ser Pro Lys Ala Thr His Arg Ile Gly  
                         20                      25                      30  
Asn Thr Ser Gly Ser Lys Gly Ser Tyr Ser Ala Lys Ala Tyr Glu Ser  
                         35                      40                      45  
Ile Arg Val Ser Ser Glu Leu Gln Gln Thr Trp Thr Lys Arg Lys His  
                         50                      55                      60  
Gly Gln Glu Met Thr Ser Lys Ser Leu Gln Thr Asp Thr Ile Val Glu  
65                      70                      75                      80  
Glu Lys Lys Glu Val Lys Leu Val Glu Glu Thr Val Val Pro Glu Glu  
                         85                      90                      95  
Lys Ser Ala Asp Val Arg Glu Ala Ala Ile Glu Leu Pro Glu Ser Val  
                         100                      105                      110  
Gln Asp Val Glu Ile Pro Pro Asn Ile Pro Ser Val Gln Leu Lys Met  
                         115                      120                      125

Asp	Arg	Ser	Gln	Gln	Thr	Ser	Arg	Thr	Gly	Tyr	Trp	Thr	Met	Met	Asn
130						135					140				
Ile	Pro	Pro	Val	Glu	Lys	Val	Asp	Lys	Glu	Gln	Gln	Thr	Tyr	Phe	Ser
145					150					155					160
Glu	Ser	Glu	Ile	Val	Val	Ile	Ser	Arg	Pro	Asp	Ser	Ser	Ser	Thr	Lys
				165					170					175	
Ser	Lys	Glu	Asp	Ala	Leu	Lys	His	Lys	Ser	Ser	Gly	Lys	Ile	Phe	Ala
			180					185					190		
Ser	Glu	His	Pro	Glu	Phe	Gln	Pro	Ala	Thr	Asn	Ser	Asn	Glu	Glu	Ile
		195					200					205			
Gly	Gln	Lys	Asn	Ile	Ser	Arg	Thr	Ser	Phe	Thr	Gln	Glu	Thr	Lys	Lys
	210					215					220				
Gly	Pro	Pro	Val	Leu	Leu	Glu	Asp	Glu	Leu	Arg	Glu	Glu	Val	Thr	Val
225				230					235						240
Pro	Val	Val	Gln	Glu	Gly	Ser	Ala	Val	Lys	Lys	Val	Ala	Ser	Ala	Glu
			245					250					255		
Ile	Glu	Pro	Pro	Ser	Thr	Glu	Lys	Phe	Pro	Ala	Lys	Ile	Gln	Pro	Pro
		260					265					270			
Leu	Val	Glu	Glu	Ala	Thr	Ala	Lys	Ala	Glu	Pro	Arg	Pro	Ala	Glu	Glu
		275					280					285			
Thr	His	Val	Gln	Val	Gln	Pro	Ser	Thr	Glu	Glu	Thr	Pro	Asp	Ala	Glu
	290					295					300				
Ala	Ala	Thr	Ala	Val	Ala	Glu	Asn	Ser	Val	Lys	Val	Gln	Pro	Pro	Pro
305				310						315				320	
Ala	Glu	Glu	Ala	Pro	Leu	Val	Glu	Phe	Pro	Ala	Glu	Ile	Gln	Pro	Pro
			325					330				335			
Ser	Ala	Glu	Glu	Ser	Pro	Ser	Val	Glu	Leu	Leu	Ala	Glu	Ile	Leu	Pro
		340						345				350			
Pro	Ser	Ala	Glu	Glu	Ser	Pro	Ser	Glu	Glu	Pro	Pro	Ala	Glu	Ile	Leu

355	360	365
Pro Pro Pro Ala Glu Lys Ser Pro Ser Val Glu Leu Leu Gly Glu Ile		
370	375	380
Arg Ser Pro Ser Ala Gln Lys Ala Pro Ile Glu Val Gln Pro Leu Pro		
385	390	395
Ala Glu Gly Ala Leu Glu Glu Ala Pro Ala Lys Val Glu Pro Pro Thr		
405	410	415
Val Glu Glu Thr Leu Ala Glu Val Gln Pro Leu Leu Pro Glu Glu Ala		
420	425	430
Pro Arg Glu Glu Ala Arg Glu Leu Gln Leu Ser Thr Ala Met Glu Thr		
435	440	445
Pro Ala Glu Glu Ala Pro Thr Glu Phe Gln Ser Pro Leu Pro Lys Glu		
450	455	460
Thr Thr Ala Glu Glu Ala Ser Ala Glu Ile Gln Leu Leu Ala Ala Thr		
465	470	475
Glu Ala Ser Ala Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala		
485	490	495
Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro		
500	505	510
Ala Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro Ala Glu Val Gln		
515	520	525
Pro Pro Pro Ala Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala		
530	535	540
Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro		
545	550	555
Ser Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro Ala Glu Val Gln		
565	570	575
Ser Leu Pro Ala Glu Glu Thr Pro Ile Glu Glu Thr Leu Ala Ala Val		
580	585	590



His Ser Pro Pro Ala Asp Asp Val Pro Ala Glu Glu Ala Ser Val Asp  
 595 600 605  
 Lys His Ser Pro Pro Ala Asp Leu Leu Leu Thr Glu Glu Phe Pro Ile  
 610 615 620  
 Gly Glu Ala Ser Ala Glu Val Ser Pro Pro Pro Ser Glu Gln Thr Pro  
 625 630 635 640  
 Glu Asp Glu Ala Leu Val Glu Asn Val Ser Thr Glu Phe Gln Ser Pro  
 645 650 655  
 Gln Val Ala Gly Ile Pro Ala Val Lys Leu Gly Ser Val Val Leu Glu  
 660 665 670  
 Gly Glu Ala Lys Phe Glu Glu Val Ser Lys Ile Asn Ser Val Leu Lys  
 675 680 685  
 Asp Leu Ser Asn Thr Asn Asp Gly Gln Ala Pro Thr Leu Glu Ile Glu  
 690 695 700  
 Ser Val Phe His Ile Glu Leu Lys Gln Arg Pro Pro Glu Leu  
 705 710 715

&lt;210&gt; 3625

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3625

Met Gly Val Val Pro Val Ser Tyr Phe Ile Arg Asn Met Glu Glu Ser  
 1 5 10 15  
 Tyr Val Asn Leu Asn His His Gly Leu Gly Pro Arg Gly Thr Lys Ala  
 20 25 30  
 Ile Ala Ile Ala Leu Val Ser Asn Met Ala Val Thr Lys Leu Glu Leu

35 40 45  
Glu Asp Asn Cys Ile Met Glu Glu Gly Val Leu Ser Leu Val Glu Met  
50 55 60  
Leu Gln Glu Asn Tyr Tyr Leu Gln Glu Met Asn Ile Ser Asn Asn His  
65 70 75 80  
Leu Gly Leu Glu Gly Ala Arg Ile Ile Ser Asp Phe Phe Glu Arg Asn  
85 90 95  
Ser Ser Ser Ile Trp Ser Leu Glu Leu Ser Gly Asn Asp Phe Lys Glu  
100 105 110  
Asp Ser Ala Ala Leu Leu Cys Gln Ala Leu Ser Thr Asn Tyr Gln Ile  
115 120 125  
Lys Lys Leu Asp Leu Ser His Asn Gln Phe Ser Asp Val Gly Gly Glu  
130 135 140  
His Leu Gly Gln Met Leu Ala Ile Asn Val Gly Leu Thr Ser Leu Asp  
145 150 155 160  
Leu Ser Trp Asn Asn Phe His Thr Arg Gly Ala Val Ala Leu Cys Asn  
165 170 175  
Gly Leu Arg Gly Lys Ser Ser Asp Ser Thr Ala Ala Trp Ser Thr Trp  
180 185 190  
Ile Ser Val Ala Met Thr Ser Ala Met Lys Gly Pro Pro Lys Ser Ala  
195 200 205  
Lys Asp Trp Asn Pro Met Lys Ala Ser Glu Phe  
210 215

&lt;210&gt; 3626

&lt;211&gt; 563

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3626

Met Ile Lys Arg Lys Ile Trp Cys Asn Leu Cys Ile Asp Leu Val Ala  
 1 5 10 15  
 Phe Thr Ser Glu Ile Phe Lys Gly Ala Val Phe Gln Ser Leu Asp Gly  
 20 25 30  
 Ile Val Val Ser Ala Asn Cys Lys Leu Arg Lys Ile Phe Thr Leu Lys  
 35 40 45  
 Ser Lys Pro Gln Asp Thr Ala Asp Lys Asp Ala Val Tyr Gly Val Pro  
 50 55 60  
 Phe Ser Thr Asp Glu Pro Thr Asp Ile Ile Pro Arg Ser Cys Gln Leu  
 65 70 75 80  
 Met Thr Asp Val Pro His Val Thr Gln Leu Leu Asn Met Thr Lys Leu  
 85 90 95  
 Arg Gln Thr Glu Ile Lys Phe Gly Gly His Pro Leu Arg Ser Ala Glu  
 100 105 110  
 Ser Asp Gln Phe Ile Asn Arg Gly Thr Ser Ile Thr Arg Asn Ser Lys  
 115 120 125  
 Asn Gln Asp Val Cys His Ile Ala Phe Gly Ser Lys Val Leu Gly Pro  
 130 135 140  
 Pro Pro Leu Ser Gly Arg Arg Asn Asn Met Lys Ile Ser Ser Glu Thr  
 145 150 155 160  
 Val Arg Ser Val Gly Ser Lys Asn Asn Arg Ser Cys Gln Pro Ser Thr  
 165 170 175  
 Val Glu Lys Cys Val Asn Gly Thr Glu Met Ser Ala Leu Leu Ile Pro  
 180 185 190  
 Glu Ser Glu Glu Gln Gly Asn Lys Glu Asn Ile His Gln Ile Lys Gln  
 195 200 205  
 Thr Val Pro Ile His Ala Ala Asn Leu His Ile Met His Pro His Pro

210	215	220
Pro Gln Glu Pro Ser Ala Asp Lys Asn Asn Asn Arg Arg Arg Leu Arg		
225	230	235
Leu Lys Ser Thr Ser Arg Glu Arg Thr Glu Thr Pro Ser Gly Ser Ser		240
	245	250
Ser Gly Asn Asn Arg Ile Glu Asp Lys Ala Ser Thr Ile Leu Thr Thr		255
	260	265
Val Ser Gln Gln Gly Ala Glu Leu Leu Asn Ser Gly Thr Leu Gly Pro		270
	275	280
Gln Ser Pro Asp Gln Ser Asp Glu Trp Ile Phe Pro Glu Asn Ala Asp		285
	290	295
His Ile Ser Tyr Leu Ala Ser Ser Arg Gln Ser Leu Leu Leu Gly Asp		300
	305	310
Asp Ser Cys Asn Pro Ser His Leu Trp Leu Glu Ala Ser Lys Glu Ser		315
	325	330
Glu His Asp Gln Gln Ala Glu Glu Ser Gln Ser Val Pro Lys Asp Ile		335
	340	345
Phe Thr Phe Ser Ser Arg Pro Arg Ser Ala Pro His Gly Lys Thr Gln		350
	355	360
Thr Met Ser Pro Glu Glu Leu Ser Phe Ile Leu Asp Leu Lys Glu Asp		365
	370	375
Asn Ser Val Thr Ser Arg Asp Thr Gln Ser Glu Asp Asp Phe Tyr Gly		380
	385	390
Gly Asp Ser Ser Glu Glu Glu Tyr Asp Trp Arg Asn Tyr Gln Pro Ser		395
	405	410
Gln Met Ser Glu Ser Glu Leu Gln Met Leu Ala Ser Leu Arg Trp Gln		415
	420	425
Gln Asn Glu Glu Leu Glu Asp Ala Gly Thr Ser His Gly Leu Ser Ala		430
	435	440
		445

Ser Gln Val Asp Asn Cys Asn Val Ser Ile Ser Thr Ser Ser Asp Asp  
 450 455 460  
 Thr Thr Thr Trp Asn Ser Cys Leu Pro Pro Pro Val Asn Gln Gly Arg  
 465 470 475 480  
 His Tyr Gln Lys Glu Met Asn Pro Pro Ser Pro Ser Asn Pro Arg Asp  
 485 490 495  
 Trp Leu Asn Met Leu Ser Pro Pro Ile Val Pro Pro Ser Gln Gln Pro  
 500 505 510  
 Ala Glu Gln Arg Pro Asp Ser Cys Glu Ser Leu Ser Val Gln Gly Glu  
 515 520 525  
 Glu Asp Leu Ser Val Glu Glu Asp Glu Glu Val Leu Thr Leu Leu Tyr  
 530 535 540  
 Asp Pro Cys Leu Asn Cys Tyr Phe Asp Pro Gln Thr Gly Lys Tyr Tyr  
 545 550 555 560  
 Glu Leu Val

<210> 3627

<211> 512

<212> PRT

<213> Homo sapiens

<400> 3627

Met Asn Val Arg Ile Asp Pro Ser Ser Leu Ser Phe Asn Met Trp Lys  
 1 5 10 15  
 Glu Ile Pro Ile Pro Phe Tyr Leu Ser Val Tyr Phe Phe Asp Val Met  
 20 25 30  
 Asn Pro Ser Glu Ile Leu Lys Gly Glu Lys Pro Gln Val Arg Glu Arg

35	40	45
Gly Pro Tyr Val Tyr Arg Glu Phe Arg His Lys Ser Asn Ile Thr Phe		
50	55	60
Asn Asn Asn Asp Thr Val Ser Phe Leu Glu Tyr Arg Thr Phe Gln Phe		
65	70	75
Gln Pro Ser Lys Ser His Gly Ser Glu Ser Asp Tyr Ile Val Met Pro		
85	90	95
Asn Ile Leu Val Leu Gly Ala Ala Val Met Met Glu Asn Lys Pro Met		
100	105	110
Thr Leu Lys Leu Ile Met Thr Leu Ala Phe Thr Thr Leu Gly Glu Arg		
115	120	125
Ala Phe Met Asn Arg Thr Val Gly Glu Ile Met Trp Gly Tyr Lys Asp		
130	135	140
Pro Leu Val Asn Leu Ile Asn Lys Tyr Phe Pro Gly Met Phe Pro Phe		
145	150	155
Lys Asp Lys Phe Gly Leu Phe Ala Glu Leu Asn Asn Ser Asp Ser Gly		
165	170	175
Leu Phe Thr Val Phe Thr Gly Val Gln Asn Ile Ser Arg Ile His Leu		
180	185	190
Val Asp Lys Trp Asn Gly Leu Ser Lys Val Asp Phe Trp His Ser Asp		
195	200	205
Gln Cys Asn Met Ile Asn Gly Thr Ser Gly Gln Met Trp Pro Pro Phe		
210	215	220
Met Thr Pro Glu Ser Ser Leu Glu Phe Tyr Ser Pro Glu Ala Cys Arg		
225	230	235
Ser Met Lys Leu Met Tyr Lys Glu Ser Gly Val Phe Glu Gly Ile Pro		
245	250	255
Thr Tyr Arg Phe Val Ala Pro Lys Thr Leu Phe Ala Asn Gly Ser Ile		
260	265	270

Tyr Pro Pro Asn Glu Gly Phe Cys Pro Cys Leu Glu Ser Gly Ile Gln  
275 280 285

Asn Val Ser Thr Cys Arg Phe Ser Ala Pro Leu Phe Leu Ser His Pro  
290 295 300

His Phe Leu Asn Ala Asp Pro Val Leu Ala Glu Ala Val Thr Gly Leu  
305 310 315 320

His Pro Asn Gln Glu Ala His Ser Leu Phe Leu Asp Ile His Pro Val  
325 330 335

Thr Gly Ile Pro Met Asn Cys Ser Val Lys Leu Gln Leu Ser Leu Tyr  
340 345 350

Met Lys Ser Val Ala Gly Ile Gly Gln Thr Gly Lys Ile Glu Pro Val  
355 360 365

Val Leu Pro Leu Leu Trp Phe Ala Glu Ser Gly Ala Met Glu Gly Glu  
370 375 380

Thr Leu His Thr Phe Tyr Thr Gln Leu Val Leu Met Pro Lys Val Met  
385 390 395 400

His Tyr Ala Gln Tyr Val Leu Leu Ala Leu Gly Cys Val Leu Leu Leu  
405 410 415

Val Pro Val Ile Cys Gln Ile Arg Ser Gln Val Gly Ala Gly Gln Arg  
420 425 430

Ala Ala Arg Ala Asp Ser His Ser Leu Ala Cys Trp Gly Lys Gly Ala  
435 440 445

Ser Asp Arg Thr Leu Trp Pro Thr Ala Ala Trp Ser Pro Pro Pro Ala  
450 455 460

Ala Val Leu Arg Leu Cys Arg Ser Gly Ser Gly His Cys Trp Gly Leu  
465 470 475 480

Arg Ser Thr Leu Ala Ser Phe Ala Cys Arg Val Ala Thr Thr Leu Pro  
485 490 495

Val Leu Glu Gly Leu Gly Pro Ser Leu Gly Gly Gly Thr Gly Gly Leu

500

505

510

&lt;210&gt; 3628

&lt;211&gt; 444

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3628

Met Glu Asn Ser Gly Lys Ala Asn Lys Lys Asp Thr His Asp Gly Pro

1

5

10

15

Pro Lys Glu Ile Lys Leu Pro Thr Ser Glu Ala Leu Leu Asp Tyr Gln

20

25

30

Cys Gln Ile Lys Glu Asp Ala Val Glu Gln Phe Met Phe Gln Ile Lys

35

40

45

Thr Leu Arg Lys Lys Asn Gln Lys Tyr His Glu Arg Asn Ser Arg Leu

50

55

60

Lys Glu Glu Gln Ile Trp His Ile Arg His Leu Leu Lys Glu Leu Ser

65

70

75

80

Glu Glu Lys Ala Glu Gly Leu Pro Val Val Thr Arg Glu Asp Val Glu

85

90

95

Glu Ala Met Lys Glu Lys Trp Lys Phe Glu Arg Asp Gln Glu Lys Asn

100

105

110

Leu Arg Asp Met Arg Met Gln Ile Ser Asn Ala Glu Lys Leu Phe Leu

115

120

125

Glu Lys Leu Ser Glu Lys Glu Tyr Trp Glu Glu Tyr Lys Asn Val Gly

130

135

140

Ser Glu Arg His Ala Lys Leu Ile Thr Ser Leu Gln Asn Asp Ile Asn

145

150

155

160



Thr Val Lys Glu Asn Ala Glu Lys Met Ser Glu His Tyr Lys Ile Thr  
 165 170 175  
 Leu Glu Asp Thr Arg Lys Lys Ile Ile Lys Glu Thr Leu Leu Gln Leu  
 180 185 190  
 Asp Gln Lys Lys Glu Trp Ala Thr Gln Asn Ala Val Lys Leu Ile Asp  
 195 200 205  
 Lys Gly Ser Tyr Leu Glu Ile Trp Glu Asn Asp Trp Leu Lys Lys Glu  
 210 215 220  
 Val Ala Ile His Arg Lys Glu Val Glu Glu Leu Lys Asn Ala Ile His  
 225 230 235 240  
 Glu Leu Glu Ala Glu Asn Leu Val Leu Ile Asp Gln Leu Ser Asn Cys  
 245 250 255  
 Arg Leu Val Asp Leu Lys Ile Pro Arg Tyr Pro Val Leu His Ser Cys  
 260 265 270  
 Pro Thr Ser Asn Pro Arg His Leu Leu Leu Leu Pro Leu Glu Ser Cys  
 275 280 285  
 Leu Ile Ser Ala Arg Arg Cys Trp Arg Leu Tyr Leu Thr Gln Ala Ala  
 290 295 300  
 Gly Leu Glu Val Pro Pro Glu Glu Met Ser Leu Glu Leu Pro Glu Thr  
 305 310 315 320  
 His Ile Glu Glu Lys Ser Glu Leu Gln Pro Thr Glu Val Glu Ser Arg  
 325 330 335  
 Asp Leu Met Ser Ser Ser Asp Glu Ser Thr Ile Leu His Leu Ser His  
 340 345 350  
 Glu Asn Ser Ile Glu Asp Leu Gln Tyr Val Lys Ile Asp Lys Glu Glu  
 355 360 365  
 Asn Ser Gly Thr Glu Phe Gly Asp Thr Asp Met Lys Tyr Leu Leu Tyr  
 370 375 380  
 Glu Asp Glu Lys Asp Phe Lys Asp Tyr Val Asn Leu Gly Pro Leu Gly

385                      390                      395                      400  
 Val Lys Leu Met Ser Val Glu Ser Lys Lys Met Pro Ile His Phe Gln  
                          405                      410                      415  
 Glu Lys Glu Ile Pro Val Lys Leu Tyr Lys Asp Val Arg Ser Pro Glu  
                          420                      425                      430  
 Ser His Ile Thr Tyr Lys Met Met Lys Ser Phe Leu  
                          435                      440

<210> 3629

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3629

Met Leu Ser Asn Leu His Glu Leu Leu Pro Asn His Leu Met Glu Thr  
     1                      5                      10                      15  
 Leu Tyr Ser Arg Lys Ser Glu Glu Asp Lys Lys Lys Cys Glu Asn Pro  
                          20                      25                      30  
 Glu Leu Ser Gly Leu Glu Arg Ile Leu Ala Arg His Gln Leu Pro Lys  
                          35                      40                      45  
 Glu Ile Asn Leu Thr Pro Lys Pro Asn Arg Met Pro Pro Trp Lys Arg  
                          50                      55                      60  
 Lys Ile Ile Asn Asn Val Thr Asp Gly Trp Lys Lys Cys His Leu Leu  
                          65                      70                      75                      80  
 Lys Arg Asn Thr Lys Glu Pro Pro Met Ser Thr Ile Val Val Ser Asn  
                          85                      90                      95  
 Thr Ile Pro Ser Ile Leu Leu Pro Cys Tyr Met Ala Glu Lys Glu His  
                          100                      105                      110

Ala Thr His

115

&lt;210&gt; 3630

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3630

Met Cys Lys His Gly Pro Phe Thr Phe Leu Tyr Leu Pro Cys Arg Ile

1 5 10 15

Phe Thr Lys Ile Leu Gly Gly Gly Ala Val Asn Ile Ala His Tyr Ala

20 25 30

Arg Gln Glu Val Ile Asn Val Ser Pro Gly Tyr Gln Leu Val Arg Asn

35 40 45

Arg Glu Gln Ile Ser Val Thr Leu Gly Asp Glu Met Phe Asp Arg Lys

50 55 60

Lys Arg Trp Glu Ser Glu Ile Pro Asp Lys Gly Arg Phe Ser Arg Thr

65 70 75 80

Asn Ile Ile Ser Asp Leu Glu Glu Gln Ile Ser Glu Leu Thr Ala Ile

85 90 95

Ile Glu Gln Met Asn Arg Asp His Gln Ser Ala Gln Lys Leu Gly Ala

100 105 110

Gln Arg Gly Pro

115

&lt;210&gt; 3631

&lt;211&gt; 356

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3631

Met Asp Thr Gln Gly Pro Val Ser Gln Pro Phe Gln Gln Pro Glu Lys

1 5 10 15

Pro Gly Arg Val Arg Arg Arg Lys Thr Arg Arg Glu Arg Asn Lys Ala

20 25 30

Leu Val Gly Ser Arg Arg Pro Leu Ala His His Asp Pro Pro Val Ala

35 40 45

Ile Arg Asp Pro Pro Val Val Pro Thr Ala Ser Lys Leu Val Val Ile

50 55 60

Thr Gln Gly Arg Leu Ser Arg Glu His Arg Gly Leu Phe Asn His Glu

65 70 75 80

Val Lys Ser Leu Asp Val Ala Arg Leu Leu Ser Ser Gly Thr Leu Val

85 90 95

Pro Gly Ser Pro Thr Leu Pro Ala Lys Pro Ser Pro Ser Pro Gly Arg

100 105 110

Ala Gln Glu Pro Ala Pro Arg Ser Arg Asp Lys Glu Asn Gln Val Pro

115 120 125

Gly Gly Ser Gly Pro Gly Pro Pro Ser Ser Pro Glu Leu Ser Gly Val

130 135 140

Gly Gln Leu Leu Ala Glu Leu Gln Cys Gln Leu Ser Leu Pro Gln Ala

145 150 155 160

Phe Pro Arg Arg Asn Leu Ile Gln Asp Ala Arg Asp Ala Ile Val His

165 170 175

Thr Leu Gln Ala Cys His Gly Cys Val Pro Asp Leu Ala Leu Val Leu

180 185 190

Arg Gly Cys Gln Pro Pro Leu Pro Gly Ala Lys Pro Gly Val Ser Glu  
195 200 205

Arg Lys Met Thr Pro Phe Trp Ile Asn Ser Pro Asp Gln Val Pro Glu  
210 215 220

Gln Glu Arg Gln Arg Lys Gln Gln Gly Thr Lys Glu Phe Thr Phe Pro  
225 230 235 240

Met Pro Tyr Thr Ser Ser Met Pro Thr Ala His Arg Gly Ser Leu Ala  
245 250 255

Pro Pro Arg Gly Pro Trp Pro Pro Tyr Phe Pro Ser Leu Ser Ser Pro  
260 265 270

Ser Gly Thr Ala Trp Gly Pro Pro Thr Ala Phe Asp Leu Leu Lys Ser  
275 280 285

Ile Trp Leu Val Ala Thr Pro Pro Pro Pro Arg Pro Trp Gly Val Gly  
290 295 300

Leu Pro Gln Pro Leu Pro Gln Pro Ser Ser Pro Leu Leu Pro Arg Thr  
305 310 315 320

Ser Val Leu Asp Trp Ser Pro Ser Pro Pro Ser Pro Leu Pro Ser Leu  
325 330 335

Ser Trp Val Val Ala Gln Ser Ser Pro Glu Ala Trp Ser Phe Pro Pro  
340 345 350

Met Arg Leu Tyr  
355

<210> 3632

<211> 571

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3632

Met	Val	Gly	Glu	Gly	Pro	Tyr	Leu	Ile	Ser	Asp	Leu	Asp	Gln	Arg	Gly
1				5					10					15	
Arg	Arg	Arg	Ser	Phe	Ala	Glu	Arg	Tyr	Asp	Pro	Ser	Leu	Lys	Thr	Met
			20					25					30		
Ile	Pro	Val	Arg	Pro	Cys	Ala	Arg	Leu	Ala	Pro	Asn	Pro	Val	Asp	Asp
		35					40					45			
Ala	Gly	Leu	Leu	Ser	Phe	Ala	Thr	Phe	Ser	Trp	Leu	Thr	Pro	Val	Met
	50					55					60				
Val	Lys	Gly	Tyr	Arg	Gln	Arg	Leu	Thr	Val	Asp	Thr	Leu	Pro	Pro	Leu
65					70					75				80	
Ser	Thr	Tyr	Asp	Ser	Ser	Asp	Thr	Asn	Ala	Lys	Arg	Phe	Arg	Val	Leu
				85					90				95		
Trp	Asp	Glu	Glu	Val	Ala	Arg	Val	Gly	Pro	Glu	Lys	Ala	Ser	Leu	Ser
		100						105					110		
His	Val	Val	Trp	Lys	Phe	Gln	Arg	Thr	Arg	Val	Leu	Met	Asp	Ile	Val
		115					120						125		
Ala	Asn	Ile	Leu	Cys	Ile	Ile	Met	Ala	Ala	Ile	Gly	Pro	Thr	Val	Leu
		130					135					140			
Ile	His	Gln	Ile	Leu	Gln	Gln	Thr	Glu	Arg	Thr	Ser	Gly	Lys	Val	Trp
145					150					155				160	
Val	Gly	Ile	Gly	Leu	Cys	Ile	Ala	Leu	Phe	Ala	Thr	Glu	Phe	Thr	Lys
			165						170				175		
Val	Phe	Phe	Trp	Ala	Leu	Ala	Trp	Ala	Ile	Asn	Tyr	Arg	Thr	Ala	Ile
		180						185					190		
Arg	Leu	Lys	Val	Ala	Leu	Ser	Thr	Leu	Val	Phe	Glu	Asn	Leu	Val	Ser
		195					200					205			
Phe	Lys	Thr	Leu	Thr	His	Ile	Ser	Val	Gly	Glu	Val	Leu	Asn	Ile	Leu
	210					215						220			

Ser Ser Asp Ser Tyr Ser Leu Phe Glu Ala Ala Leu Phe Cys Pro Leu  
225 230 235 240  
Pro Ala Thr Ile Pro Ile Leu Met Val Phe Cys Val Ala Tyr Ala Phe  
245 250 255  
Phe Ile Leu Gly Pro Thr Ala Leu Ile Gly Ile Ser Val Tyr Val Ile  
260 265 270  
Phe Ile Pro Val Gln Met Phe Met Ala Lys Leu Asn Ser Ala Phe Arg  
275 280 285  
Arg Ser Ala Ile Leu Val Thr Asp Lys Arg Val Gln Thr Met Asn Glu  
290 295 300  
Phe Leu Thr Cys Ile Arg Leu Ile Lys Met Tyr Ala Trp Glu Lys Ser  
305 310 315 320  
Phe Thr Asn Thr Ile Gln Asp Ile Arg Arg Arg Glu Arg Lys Leu Leu  
325 330 335  
Glu Lys Ala Gly Phe Val Gln Ser Gly Asn Ser Ala Leu Ala Pro Ile  
340 345 350  
Val Ser Thr Ile Ala Ile Val Leu Thr Leu Ser Cys His Ile Leu Leu  
355 360 365  
Arg Arg Lys Leu Thr Ala Pro Val Ala Phe Ser Val Ile Ala Met Phe  
370 375 380  
Asn Val Met Lys Phe Ser Ile Ala Ile Leu Pro Phe Ser Ile Lys Ala  
385 390 395 400  
Met Ala Glu Ala Asn Val Ser Leu Arg Arg Met Lys Lys Ile Leu Ile  
405 410 415  
Asp Lys Ser Pro Pro Ser Tyr Ile Thr Gln Pro Glu Asp Pro Asp Thr  
420 425 430  
Val Leu Leu Leu Ala Asn Ala Thr Leu Thr Trp Glu His Glu Ala Ser  
435 440 445  
Arg Lys Ser Thr Pro Lys Lys Leu Gln Asn Gln Lys Arg His Leu Cys

450                      455                      460  
 Lys Lys Gln Arg Ser Glu Ala Tyr Ser Glu Arg Ser Pro Pro Ala Lys  
 465                      470                      475                      480  
 Gly Ala Thr Gly Pro Glu Glu Gln Ser Asp Ser Leu Lys Ser Val Leu  
                          485                      490                      495  
 His Ser Ile Ser Phe Val Val Arg Lys Gly Lys Ile Leu Gly Ile Cys  
                          500                      505                      510  
 Gly Asn Val Gly Ser Gly Lys Ser Ser Leu Leu Ala Ala Leu Leu Gly  
                          515                      520                      525  
 Gln Met Gln Leu Gln Lys Gly Val Val Ala Val Asn Gly Thr Leu Ala  
                          530                      535                      540  
 Tyr Val Ser Gln Gln Ala Trp Ile Phe His Gly Asn Val Arg Glu Asn  
 545                      550                      555                      560  
 Ile Leu Phe Gly Glu Lys Tyr Asp His Gln Arg  
                          565                      570

<210> 3633

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3633

Met Pro Gln Pro Ser Val Ser Gly Met Asp Pro Pro Phe Gly Asp Ala  
 1                      5                      10                      15  
 Phe Arg Ser His Thr Phe Ser Glu Gln Thr Leu Met Ser Thr Asp Leu  
                          20                      25                      30  
 Leu Ala Asn Ser Ser Asp Pro Asp Phe Met Tyr Glu Leu Asp Arg Glu  
                          35                      40                      45



Met Asn Tyr Gln Gln Asn Pro Arg Asp Asn Phe Leu Ser Leu Glu Asp  
50 55 60  
Cys Lys Asp Ile Glu Asn Leu Glu Ser Phe Thr Asp Val Leu Asp Asn  
65 70 75 80  
Glu Gly Ala Leu Thr Ser Asn Trp Glu Gln Trp Asp Thr Tyr Cys Glu  
85 90 95  
Asp Leu Thr Lys Tyr Thr Lys Leu Thr Ser Cys Asp Ile Trp Gly Thr  
100 105 110  
Lys Glu Val Asp Tyr Leu Gly Leu Asp Asp Phe Ser Ser Pro Tyr Gln  
115 120 125  
Asp Glu Glu Val Ile Ser Lys Thr Pro Thr Leu Ala Gln Leu Asn Ser  
130 135 140  
Glu Asp Ser Gln Ser Val Ser Asp Ser Leu Tyr Tyr Pro Asp Ser Leu  
145 150 155 160  
Phe Ser Val Lys Gln Asn Pro Leu Pro Ser Ser Phe Pro Gly Lys Lys  
165 170 175  
Ile Thr Ser Arg Ala Ala Ala Pro Val Cys Ser Ser Lys Thr Leu Gln  
180 185 190  
Ala Glu Val Pro Leu Ser Asp Cys Val Gln Lys Ala Ser Lys Pro Thr  
195 200 205  
Ser Ser Thr Gln Ile Met Val Lys Thr Asn Met Tyr His Asn Glu Lys  
210 215 220  
Val Asn Phe His Val Glu Cys Lys Asp Tyr Val Lys Lys Ala Lys Val  
225 230 235 240  
Lys Ile Asn Pro Val Gln Gln Ser Arg Pro Leu Leu Ser Gln Ile His  
245 250 255  
Thr Asp Ala Ala Lys Glu Asn Thr Cys Tyr Cys Gly Ala Val Ala Lys  
260 265 270  
Arg Gln Glu Lys Lys Gly Met Glu Pro Leu Gln Gly His Ala Thr Pro

275					280					285					
Ala	Leu	Pro	Phe	Lys	Glu	Thr	Gln	Glu	Leu	Leu	Leu	Ser	Pro	Leu	Pro
290					295					300					
Gln	Glu	Gly	Pro	Gly	Ser	Leu	Ala	Ala	Gly	Glu	Ser	Ser	Ser	Leu	Ser
305					310					315					320
Ala	Ser	Thr	Ser	Val	Ser	Asp	Ser	Ser	Gln	Lys	Lys	Glu	Glu	His	Asn
325					330					335					
Tyr	Ser	Leu	Phe	Val	Ser	Asp	Asn	Leu	Gly	Glu	Gln	Pro	Thr	Lys	Cys
340					345					350					
Ser	Pro	Glu	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Asp	Val	Asp	Asp	Glu	Asp
355					360					365					
His	Asp	Glu	Gly	Phe	Gly	Ser	Glu	His	Glu	Leu	Ser	Glu	Asn	Glu	Glu
370					375					380					
Glu	Glu	Glu	Glu	Glu	Glu	Asp	Tyr	Glu	Asp	Asp	Lys	Asp	Asp	Asp	Ile
385					390					395					400
Ser	Asp	Thr	Phe	Ser	Glu	Pro	Gly	Ile	Ile	Met	Leu	Ala	Ser	Leu	Pro
405					410					415					
Asp															

<210> 3634

<211> 157

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3634

Met Trp Arg Gln Glu Glu Glu Leu Arg Asp Gln Glu Lys Leu Arg Lys

1 5 10 15

His Glu Glu Lys Thr Trp Arg Gln Glu Gln Arg Leu Arg Asp Gln Glu  
20 25 30  
Lys Glu Leu Arg Lys Gln Glu Lys Gln Met Leu Lys Gln Lys Glu Gln  
35 40 45  
Met Ala Glu Gln Glu Glu Gln Met Gln Lys Gln Glu Glu Gln Val Arg  
50 55 60  
Lys Gln Glu Glu Gln Val Arg Lys Gln Glu Glu Gln Met Trp Lys Gln  
65 70 75 80  
Glu Glu Gln Met Arg Lys Gln Glu Glu Gln Met Arg Lys Gln Glu Lys  
85 90 95  
Gln Met Gly Glu Gln Glu Glu Gln Met Arg Lys Arg Glu Glu Gln Met  
100 105 110  
Arg Lys Arg Glu Glu Gln Ile Thr Gln Leu Pro Pro Gly Met Lys Asn  
115 120 125  
Thr Gln Glu His Pro Gly Leu Gly Ser Thr Ser Cys Ile Leu Phe Phe  
130 135 140  
Tyr Arg Gly Asp Lys Lys Lys Ile Lys Ile Ile Asn Ile  
145 150 155

&lt;210&gt; 3635

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3635

Met Thr Pro Pro Met Arg Thr Gln Gly Thr Glu Thr Lys Ser Lys Lys  
1 5 10 15  
Ala Leu Arg Val Glu Gly Ser Ser Gly Ala Lys Gly Arg Val Arg Ala

20 25 30  
 Thr Pro Ala Arg Arg His Phe Gln Thr Asp Leu Pro Ala Pro Arg Asn  
 35 40 45  
 Arg Ser Arg Pro Pro Ser Ser Cys Ile Leu Asp Pro Thr Gln Thr Arg  
 50 55 60  
 Ser Arg Thr His Leu Pro Arg Ala Pro Gln Thr Leu Thr Ala Ser Gly  
 65 70 75 80  
 Ala Ala Asp Thr Asp Gln Val Pro His Ser Leu Gly Leu Gln Gly Arg  
 85 90 95  
 Ser Arg Arg Pro Leu Thr Leu Arg Glu Ala Leu Thr Asp Gly Ala Leu  
 100 105 110  
 Pro Arg Leu Ala Ser Thr Pro Arg Gln Arg Leu Pro Ile Ala Val Arg  
 115 120 125  
 Leu Pro Gly Ile Gly Pro Ala Ala Thr Pro Ala Cys Arg Pro Arg Gly  
 130 135 140  
 Thr Val Ala Leu Pro Val Pro Glu Gly Thr Arg Asp Thr Cys Ser Thr  
 145 150 155 160  
 Ala Ile Pro Tyr Thr Cys Glu Ala Pro  
 165

&lt;210&gt; 3636

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3636

Met Ile His Leu Lys Gly Ser Ser Ser Gly Glu Ser Gln Tyr Leu Pro  
 1 5 10 15

Gln His Cys Arg Met Gly Arg Ser Leu Pro Pro Thr His Ser Thr His  
                     20                    25                    30  
 Leu Thr Pro Pro Phe Gln Gly Lys Asp Leu Arg Ala Ala Gly Glu Ser  
                     35                    40                    45  
 Glu Ile Gly Arg His Gly Ala Asn Trp Ala Thr Ala Arg Asp Leu Glu  
                     50                    55                    60  
 Pro Thr Pro Leu Asn Ser Glu His Arg Lys Arg Arg Gln Ala Arg Arg  
                     65                    70                    75                    80  
 Gly Gln Glu Ala Asp Thr Arg Ala Gly Gln Arg Asn Gly Gly Glu His  
                                     85                    90                    95  
 Thr His Ala Leu Arg Ser Lys Ala Glu Arg Cys Glu Phe Thr Lys Thr  
                     100                    105                    110  
 Gly Val His Arg Pro Ile Thr Asp Thr Asp Pro Gly Trp Pro Gly Ala  
                     115                    120                    125  
 Pro His Thr Gly  
                     130

<210> 3637

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3637

Met Glu Cys Asn Gly Leu Ile Leu Ala His Cys Asn Leu Cys Leu Pro  
                     1                    5                    10                    15  
 Gly Ser Gly Asp Ser Pro Ala Ser Ala Ser Gln Val Ala Gly Thr Thr  
                     20                    25                    30  
 Gly Thr His His Cys Thr Gln Leu Ile Phe Val Phe Leu Val Glu Thr

35                      40                      45  
 Glu Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser  
 50                      55                      60  
 Asp Leu Pro Ala Ser Ala Ser Gln Asn Ala Gly Ile Thr Gly Val Ser  
 65                      70                      75                      80  
 His Trp Ala Trp Thr Leu Phe Phe Tyr Phe Leu Asn Lys Leu Thr Phe  
 85                      90                      95  
 Ala Leu Gln Thr His Pro Glu Phe Phe Phe Phe Phe Phe Glu Thr  
 100                      105                      110  
 Gly Ser His Cys Val Ala Gln Val Glu Trp His Tyr Leu Gly Ser Leu  
 115                      120                      125  
 Gln Pro Pro Pro Pro Arg Phe Lys  
 130                      135

&lt;210&gt; 3638

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3638

Met Met Gly Ile Phe Asn Gly Lys Ala Val Thr Gln Pro Lys Arg Gly  
 1                      5                      10                      15  
 Thr Ile Ser Glu Ala Ser Arg Gln Lys Ser Leu Asp Arg Arg Ser Asn  
 20                      25                      30  
 Glu Pro Gly Arg Glu His Arg Ala Gly Ala His Val Glu Asn Leu Leu  
 35                      40                      45  
 Arg Asn Leu Leu Glu Ala Glu Lys Thr Leu Gly Lys Ser Ser Ser His  
 50                      55                      60

<210> 3639  
<211> 164  
<212> PRT  
<213> Homo sapiens

出証特 2 0 0 4 - 3 0 5 9 6 6 0

100 105 110  
 Ile Gln Lys Leu Met Ser Asn Trp Gly Leu Met Ser Thr Cys Gly Leu  
 115 120 125  
 Gly Ile His Val Arg Leu Asp Val His Pro Arg Pro Asp Val His Leu  
 130 135 140  
 Met Leu Asp Val His Leu Thr Pro Gly Cys Leu Leu Glu Thr Ser Cys  
 145 150 155 160  
 Pro Thr Arg Ile

<210> 3640

<211> 459

<212> PRT

<213> Homo sapiens

<400> 3640

Met Ala Gly Thr Arg Trp Val Leu Gly Ala Leu Leu Arg Gly Cys Gly  
 1 5 10 15  
 Cys Asn Cys Ser Ser Cys Arg Arg Thr Gly Ala Ala Cys Leu Pro Phe  
 20 25 30  
 Tyr Ser Ala Ala Ala Ala Ala Ser Gln Thr Arg Gly Leu Gln Thr Gly  
 35 40 45  
 Pro Val Pro Pro Gly Arg Leu Ala Gly Pro Pro Ala Val Ala Thr Ser  
 50 55 60  
 Ala Ala Ala Ala Ala Ala Ala Ser Tyr Pro Ala Leu Arg Ala Ser Leu  
 65 70 75 80  
 Leu Pro Gln Ser Leu Ala Ala Ala Ala Ala Val Pro Thr Arg Ser Tyr  
 85 90 95



Ser Gln Glu Ser Lys Thr Thr Tyr Leu Glu Asp Leu Pro Pro Pro Pro  
 100 105 110  
 Glu Tyr Glu Leu Ala Pro Ser Lys Leu Glu Glu Glu Val Asp Asp Val  
 115 120 125  
 Phe Leu Ile Arg Ala Gln Gly Leu Pro Trp Ser Cys Thr Met Glu Asp  
 130 135 140  
 Val Leu Asn Phe Phe Ser Asp Cys Arg Ile Arg Asn Gly Glu Asn Gly  
 145 150 155 160  
 Ile His Phe Leu Leu Asn Arg Asp Gly Lys Arg Arg Gly Asp Ala Leu  
 165 170 175  
 Ile Glu Met Glu Ser Glu Gln Asp Val Gln Lys Ala Leu Glu Lys His  
 180 185 190  
 Arg Met Tyr Met Gly Gln Arg Tyr Val Glu Val Tyr Glu Ile Asn Asn  
 195 200 205  
 Glu Asp Val Asp Ala Leu Met Lys Ser Leu Gln Val Lys Ser Ser Pro  
 210 215 220  
 Val Val Asn Asp Gly Val Val Arg Leu Arg Gly Leu Pro Tyr Ser Cys  
 225 230 235 240  
 Asn Glu Lys Asp Ile Val Asp Phe Phe Ala Gly Leu Asn Ile Val Asp  
 245 250 255  
 Ile Thr Phe Val Met Asp Tyr Arg Gly Arg Arg Lys Thr Gly Glu Ala  
 260 265 270  
 Tyr Val Gln Phe Glu Glu Pro Glu Met Ala Asn Gln Ala Leu Leu Lys  
 275 280 285  
 His Arg Glu Glu Ile Gly Asn Arg Tyr Ile Glu Ile Phe Pro Ser Arg  
 290 295 300  
 Arg Asn Glu Val Arg Thr His Val Gly Ser Tyr Lys Gly Lys Lys Ile  
 305 310 315 320  
 Ala Ser Phe Pro Thr Ala Lys Tyr Ile Thr Glu Pro Glu Met Val Phe

	325		330		335										
Glu	Glu	His	Glu	Val	Asn	Glu	Asp	Ile	Gln	Pro	Met	Thr	Ala	Phe	Glu
	340		345		350										
Ser	Glu	Lys	Glu	Ile	Glu	Leu	Pro	Lys	Glu	Val	Pro	Glu	Lys	Leu	Pro
	355		360		365										
Glu	Ala	Ala	Asp	Phe	Gly	Thr	Thr	Ser	Ser	Leu	His	Phe	Val	His	Met
	370		375		380										
Arg	Gly	Leu	Pro	Phe	Gln	Ala	Asn	Ala	Gln	Asp	Ile	Ile	Asn	Phe	Phe
385			390		395				400						
Ala	Pro	Leu	Lys	Pro	Val	Arg	Ile	Thr	Met	Glu	Tyr	Ser	Ser	Ser	Gly
	405		410		415										
Lys	Ala	Thr	Gly	Glu	Ala	Asp	Val	His	Phe	Glu	Thr	His	Glu	Asp	Ala
	420		425		430										
Val	Ala	Ala	Met	Leu	Lys	Asp	Arg	Ser	His	Val	His	His	Arg	Tyr	Ile
	435		440		445										
Glu	Leu	Phe	Leu	Asn	Ser	Cys	Pro	Lys	Gly	Lys					
450			455												

&lt;210&gt; 3641

&lt;211&gt; 572

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3641

Met	Pro	Val	Tyr	Cys	Lys	Tyr	Gln	Phe	His	Lys	Thr	Pro	Val	His	Lys
1				5					10					15	
Thr	Lys	Gly	Glu	Pro	His	Gly	Thr	His	Val	Tyr	Phe	Gln	Asp	Ile	Asn
			20					25						30	

Val Ile Phe Leu Gly Ala Leu His Pro Ser Asp Leu Arg Glu Tyr Leu  
 35 40 45  
 Glu Gly Pro Pro Met Val Val Glu Val His Asp Arg Asp Arg Lys Ser  
 50 55 60  
 Glu Glu Cys Ser Gln Lys Pro Val Leu Phe Gly Glu Asp Pro Leu Asp  
 65 70 75 80  
 Ser Tyr Leu Asn Phe Gln Ala Leu Ile Ser Pro Arg Glu Thr Glu Asn  
 85 90 95  
 Asn Pro Phe Glu Ser Gln Asn Lys Met Trp Tyr Pro Tyr Gly Ile Ala  
 100 105 110  
 Gln Val Ser Phe Ala Asp Leu Leu Leu Gly His Lys Tyr Leu Asn Leu  
 115 120 125  
 Ala Val Pro Ile His Ser Cys Glu Val Gln Pro Thr His Cys Gly Gln  
 130 135 140  
 Asp Ser Arg Arg Arg Lys Val Val Gly Leu Gly Val Pro Arg Asp Gly  
 145 150 155 160  
 His Gln His Gly Pro Met Pro Arg Gly Asn Tyr Leu Glu Ala Asp Ser  
 165 170 175  
 Gln Leu Lys Leu Arg Val Asp Ile Ala Val Pro Leu Arg Ala Gly Ala  
 180 185 190  
 Arg Ala Ala Asp Pro Asp Leu Gly Gly Ser Gln Phe Gly Arg Ile Ile  
 195 200 205  
 Phe Val Phe Asp Phe Lys Lys Val Ser Leu Leu His Ser Leu Leu Gln  
 210 215 220  
 Asp Ile Thr Met Ile Asn Ala Lys Ala Leu Gly Leu Asp Ser Tyr Pro  
 225 230 235 240  
 Val Arg Thr Leu Gln Gln Ile Leu Ser Ala Phe Lys Val Arg Val Arg  
 245 250 255  
 Val Gln Glu Gln Gln His Leu Asp Val Leu Thr Gly Phe His Leu Leu

260 265 270  
Asp Gly Lys Thr His Leu Phe Ile Leu Glu Gly Leu Ala Asp Gln Gly  
275 280 285  
Leu Arg Gln Leu Trp Glu Asn His Gln Ser Trp Ile Pro Arg Ser Glu  
290 295 300  
His Arg Lys Tyr Lys Val Leu Tyr Asn Ser Gln Leu Leu Phe Arg Ser  
305 310 315 320  
Arg Leu Tyr Gly Asp Leu Glu Ala Ile Leu Tyr His Val His Leu Phe  
325 330 335  
Gln Pro Thr Glu Leu Leu Leu Gln Gln Ala Val Phe Phe Leu Arg Asp  
340 345 350  
Thr Glu Arg Arg Arg Val Phe Gln Ala Leu Ala Arg Ile His Asp Ile  
355 360 365  
Cys Tyr Asn Ser Thr Thr Leu Trp Asp Val Thr Val Arg Asp Leu Leu  
370 375 380  
Pro Ser Ser Ala Met Ile Lys Asp Leu Ser Gln Glu Phe Gly Met Pro  
385 390 395 400  
Leu Ser Gln Glu Glu Leu Thr Asp Glu Lys Leu Phe Ala Leu Pro Pro  
405 410 415  
Gln Pro Ala Pro Asn Leu Glu Asp Tyr His Ser Arg Asn Ser Thr Leu  
420 425 430  
Thr Leu Glu Ile His Ala His Gln Glu Pro Arg Lys Arg Phe Thr Tyr  
435 440 445  
Ser Gln Asp Tyr Leu Ser Ala Met Val Glu Pro Leu Asp Leu Lys Glu  
450 455 460  
Glu Glu Lys Lys Ala Gln Lys Lys Ser Arg Gln Ala Trp Leu Thr Ala  
465 470 475 480  
Arg Gly Phe Gln Val Thr Gly Leu Gln Ser Asp Thr Glu Ser Ser Phe  
485 490 495

Gln Asp Leu Lys Leu Pro Pro Ile Lys Glu Leu Asn Glu Glu Trp Lys  
                     500                    505                    510  
 Glu Asn Ser Leu Phe Ala Asn Val Leu Glu Pro Val Leu Asp Arg Asp  
                     515                    520                    525  
 Arg Trp Ser Trp Asp Arg His His Val Asp Phe Asp Leu Tyr Lys Lys  
                     530                    535                    540  
 Pro Pro Pro Phe Leu Glu Leu Leu Pro Ser Pro Ala Pro Lys Pro Val  
                     545                    550                    555                    560  
 Thr Val Arg Lys Lys Lys Gly Asn Ser Pro Ile Ser  
                     565                    570

<210> 3642

<211> 673

<212> PRT

<213> Homo sapiens

<400> 3642

Met Asp His Ser Cys Thr Arg Phe Ile His Arg Arg Gly Pro Pro Thr  
           1                    5                    10                    15  
 Arg Thr Arg Ala Gly Phe Lys Arg Gly Lys Arg Pro Arg Ile Gln Gln  
                     20                    25                    30  
 Arg Pro Arg Ala Arg Val Ser Gly Thr Ile Pro Ala Ser Arg Leu His  
                     35                    40                    45  
 Pro Ala Pro Ala Ser Gln Pro Gly Pro Cys Pro Ala Pro Gly His Cys  
                     50                    55                    60  
 Pro Val Gly Pro Ala His Glu Arg Pro Met Gly Ser Ser Gln Glu Glu  
                     65                    70                    75                    80  
 Gly Leu Arg Cys Gln Pro Ser Gln Pro Asp His Asp Ala Asp Gly His

	85		90		95
Cys Gly Pro Asp Leu Glu Gly Ala Glu Arg Ala Ser Ala Thr Pro Gly					
	100		105		110
Pro Pro Gly Leu Leu Asn Ser His Arg Pro Ala Asp Ser Asp Asp Thr					
	115		120		125
Asn Ala Ala Gly Pro Ser Ala Ala Leu Leu Glu Gly Leu Leu Leu Gly					
	130		135		140
Gly Gly Lys Pro Ser Pro His Ser Thr Arg Pro Gly Pro Phe Phe Tyr					
145		150		155	160
Ile Gly Gly Ser Asn Gly Ala Thr Ile Ile Ser Ser Tyr Cys Lys Ser					
	165		170		175
Lys Gly Trp Gln Arg Ile His Asp Ser Arg Arg Asp Asp Tyr Thr Leu					
	180		185		190
Lys Trp Cys Glu Val Lys Ser Arg Asp Ser Tyr Gly Ser Phe Arg Glu					
	195		200		205
Gly Glu Gln Leu Leu Asp Gln Leu Pro Asn Asn Lys Leu Leu Thr Thr					
	210		215		220
Lys Ile Gly Leu Leu Ser Thr Leu Arg Gly Arg Ala Arg Ala Met Ser					
225		230		235	240
Lys Ala Ser Lys Val Pro Gly Gly Val Gln Ala Arg Leu Glu Lys Asp					
	245		250		255
Ala Ala Ala Pro Ala Leu Glu Asp Leu Pro Trp Thr Ser Pro Gly Tyr					
	260		265		270
Leu Arg Pro Gln Arg Val Leu Arg Met Glu Glu Phe Phe Pro Glu Thr					
	275		280		285
Tyr Arg Leu Asp Leu Lys His Glu Arg Glu Ala Phe Phe Thr Leu Phe					
	290		295		300
Asp Glu Thr Gln Ile Trp Ile Cys Lys Pro Thr Ala Ser Asn Gln Gly					
305		310		315	320

Lys Gly Ile Phe Leu Leu Arg Asn Gln Glu Glu Val Ala Ala Leu Gln  
325 330 335  
Ala Lys Thr Arg Ser Met Glu Asp Asp Pro Ile His His Lys Thr Pro  
340 345 350  
Phe Arg Gly Pro Gln Ala Arg Val Val Gln Arg Tyr Ile Gln Asn Pro  
355 360 365  
Leu Leu Val Asp Gly Arg Lys Phe Asp Val Arg Ser Tyr Leu Leu Ile  
370 375 380  
Ala Cys Thr Thr Pro Tyr Met Ile Phe Phe Gly His Gly Tyr Ala Arg  
385 390 395 400  
Leu Thr Leu Ser Leu Tyr Asp Pro His Ser Ser Asp Leu Gly Gly His  
405 410 415  
Leu Thr Asn Gln Phe Met Gln Lys Lys Ser Pro Leu Tyr Met Leu Leu  
420 425 430  
Lys Glu His Thr Val Trp Ser Met Glu His Leu Asn Arg Tyr Ile Ser  
435 440 445  
Asp Thr Phe Trp Lys Ala Arg Gly Leu Ala Lys Asp Trp Val Phe Thr  
450 455 460  
Thr Leu Lys Lys Arg Met Gln Gln Ile Met Ala His Cys Phe Leu Ala  
465 470 475 480  
Ala Lys Pro Lys Leu Asp Cys Lys Leu Gly Tyr Phe Asp Leu Ile Gly  
485 490 495  
Cys Asp Phe Leu Ile Asp Asp Asn Phe Lys Val Trp Leu Leu Glu Met  
500 505 510  
Asn Ser Asn Pro Ala Leu His Thr Asn Cys Glu Val Leu Lys Glu Val  
515 520 525  
Ile Pro Gly Val Val Ile Glu Thr Leu Asp Leu Val Leu Glu Thr Phe  
530 535 540  
Arg Lys Ser Leu Arg Gly Gln Lys Met Leu Pro Leu Leu Ser Gln Arg

545                      550                      555                      560  
 Arg Phe Val Leu Leu His Asn Gly Glu Ala Asp Pro Arg Pro His Leu  
                          565                      570                      575  
 Gly Gly Ser Cys Ser Leu Arg Arg Trp Pro Pro Leu Pro Thr Arg Gln  
                          580                      585                      590  
 Ala Lys Ser Ser Gly Pro Pro Met Pro His Ala Pro Asp Gln Pro Gly  
                          595                      600                      605  
 Ala Arg Arg Pro Ala Pro Pro Pro Leu Val Pro Gln Arg Pro Arg Pro  
                          610                      615                      620  
 Pro Gly Pro Asp Leu Asp Ser Ala His Asp Gly Glu Pro Gln Ala Pro  
 625                      630                      635                      640  
 Gly Thr Glu Gln Ser Gly Thr Gly Asn Arg His Pro Ala Gln Glu Pro  
                          645                      650                      655  
 Ser Pro Gly Thr Ala Lys Glu Glu Arg Glu Glu Pro Glu Asn Ala Arg  
                          660                      665                      670  
 Pro

<210> 3643

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3643

Met Pro Ser Phe Ala Leu Val Pro Trp Ala Ala Val Gln Trp His His  
   1                      5                      10                      15  
 Leu Gly Ser Pro Gln Pro Pro Pro Pro Lys Phe Lys Arg Phe Ser Cys  
                          20                      25                      30



Leu Ser Leu Pro Ser Ile Trp Asp Tyr Arg Tyr Ala Pro Pro Arg Pro  
                   35                          40                          45  
 Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Gly Gln  
                   50                          55                          60  
 Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Ser Pro Ala Ser Ala Ser  
                   65                          70                          75                          80  
 Gln Ser Thr Gly Ile Thr Gly Val Ser His Cys Ala Trp Pro Thr Asn  
                                   85                                  90                                  95  
 Thr Arg Phe Tyr Ser Gly Pro Phe Thr Val Asn Val Gly Gly Pro Trp  
                                   100                                  105                                  110  
 Arg Met Ala Thr Pro Gly Leu Phe Ala Glu Ala Trp Thr Ala Gln Gln  
                                   115                                  120                                  125  
 Ala Glu Leu Lys Gln Leu Arg Gln Tyr Gln Leu Lys Gly His Pro Ala  
                                   130                                  135                                  140  
 Val Arg Val Pro Arg Leu Gln Glu  
                                   145                                  150

&lt;210&gt; 3644

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3644

Met Ser Arg Ala Leu Arg Pro Leu Ser Cys Leu Arg Pro Leu Ser Ser  
           1                          5                          10                          15  
 Pro Arg Ala Gly Thr Thr Gly Val Arg Val Thr Arg Thr Ser Trp Gly  
                           20                          25                          30  
 Ser Ala Trp Pro Ser Phe Gly Met Ser Pro Gly Gly Pro Arg Met Gly

35                      40                      45  
 Gly Gly Trp Asp Leu Pro Asp Val His Glu Val Leu Ile His Ala Pro  
 50                      55                      60  
 Arg Val Leu Gly Ser Asp Arg Asp Gly Asn Pro Val Leu Leu Gln Glu  
 65                      70                      75                      80  
 Arg Asp Ser Thr Gly Gly Gly Lys Ala Ala Gly Arg Thr Arg Glu Val  
 85                      90                      95  
 Arg Pro Arg Gly Pro Ala Phe Ser Glu Ser Pro Lys Leu Trp Pro Pro  
 100                      105                      110  
 Phe Arg Gln Asp Pro Gly Tyr Leu Leu Val Leu Val Thr Val Thr Ser  
 115                      120                      125  
 Leu Gly Gly Pro Tyr Cys Trp Thr Cys Pro Arg Glu Thr Ala Gly Pro  
 130                      135                      140  
 Cys Val Cys Asn Ala Asp Leu Gly Gly Ser Phe Gln Lys Thr Leu Ser  
 145                      150                      155                      160  
 Leu His Leu Lys Asp Pro  
 165

&lt;210&gt; 3645

&lt;211&gt; 293

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3645

Met Asn Val Met Asn Val Gly Arg Pro Leu Gly Leu Val His Ser Leu  
 1                      5                      10                      15  
 Phe Ser Ile Arg Glu Phe Ile Leu Lys Lys Asp Thr Met Asn Ala Met  
 20                      25                      30

Ser Val Ala Lys Pro Ser Ser Ile Ala Gln Ala Leu Leu Asp Thr Arg  
 35 40 45  
 Lys Phe Ile Leu Glu Lys Asn His Ile Cys Val Met Asn Val Gly Arg  
 50 55 60  
 Ala Ser Gly Arg Val Leu Ser Leu Ser Gly Ile Arg Glu Phe Ile Gln  
 65 70 75 80  
 Gly Thr Asn Pro Met Asn Val Met Asn Val Gly Lys Leu Leu Ala Arg  
 85 90 95  
 Thr Gln Arg Leu Leu Asp Ile Leu Glu Phe Ile Leu Val Arg Ser Pro  
 100 105 110  
 Met Tyr Val Arg Asn Val Gly Arg Pro Ser Gly Gly Thr Gln Asn Phe  
 115 120 125  
 Leu Asp Met Arg Glu Phe Thr Leu Glu Arg Asn Pro Met Asn Ala Leu  
 130 135 140  
 Ser Val Glu Arg Leu Ser Gly Gly Pro Leu Thr Leu Leu Ser Thr Arg  
 145 150 155 160  
 Glu Phe Ile Leu Glu Arg Asn Pro Ile Asn Val Met Ser Val Gln Glu  
 165 170 175  
 Pro Phe Gly Ile Ile Leu Ser Cys Phe Ser Thr Arg Lys Phe Ile Leu  
 180 185 190  
 Glu Arg Asn Leu Met Asn Val Ala Ser Val Arg Lys His Leu Ala Ser  
 195 200 205  
 Ile Pro Asn Leu Ser Tyr Ile Arg Glu Phe Thr Leu Glu Arg Ser Leu  
 210 215 220  
 Met Ser Ala Lys Asn Val Arg Arg Leu Leu Val Gly Ala Leu Thr Ser  
 225 230 235 240  
 Ser Asp Ile Lys Val Phe Thr Val Trp Ser Asn Leu Gln Asn Arg Lys  
 245 250 255  
 Ala Phe Ser Gly Lys Ala Lys Val Gln Leu Ile His Leu Phe Ile Ile

260                      265                      270  
 Cys Lys Tyr Ala Pro Gln Val Phe Lys Ser Asn Glu Trp Thr Glu Pro  
 275                      280                      285  
 Pro Leu Ser Ser His  
 290

<210> 3646

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3646

Met Asn Arg Glu His Ser Ala Ser Ile Pro Val Pro Leu Val Ala Leu  
 1                      5                      10                      15  
 Gln Ser Ala Gly Thr Arg Arg Asn Gln Lys Pro Pro Gly Arg Ala Phe  
 20                      25                      30  
 Cys Leu Tyr Gly Val Lys Ala Val Ser Ser Asn Leu Cys Phe Leu Lys  
 35                      40                      45  
 Gln Arg Asn Asn Leu Asp Glu Thr Asn Phe Pro Gln Arg Lys Gly Arg  
 50                      55                      60  
 Ala His Ser Glu Leu Val Lys Lys Met Pro Gly Ala Gly Ser Ile Leu  
 65                      70                      75                      80  
 Lys Trp Lys Arg Trp Cys Leu Ala Met Leu Pro Lys Leu Val Leu Asn  
 85                      90                      95  
 Ser Trp His Gln Val Ile Leu Leu Pro Gln Pro Pro Lys Val Leu Gly  
 100                      105                      110  
 Leu Gln Asn Lys Thr Ile Ser Arg Arg Val Cys Gly Ile Leu Arg Thr  
 115                      120                      125

Asp Thr Gly Arg Asn Lys Gly Tyr Arg Ser Glu

130

135

<210> 3647

<211> 588

<212> PRT

<213> Homo sapiens

<400> 3647

Met Ala Asn Leu Cys Thr Pro Ser Ser Thr Ala Asn Ser Cys Ser Ser

1

5

10

15

Ser Ala Ser Asn Thr Pro Gly Ala Pro Glu Thr His Pro Ser Ser Ser

20

25

30

Pro Thr Pro Thr Ser Ser Asn Thr Gln Glu Glu Ala Gln Pro Ser Ser

35

40

45

Val Ser Asp Leu Ser Pro Met Ser Met Pro Phe Ala Ser Asn Ser Glu

50

55

60

Pro Ala Pro Leu Thr Leu Thr Ser Pro Arg Met Val Ala Ala Asp Asn

65

70

75

80

Gln Asp Thr Ser Asn Leu Pro Gln Leu Ala Val Pro Ala Pro Arg Val

85

90

95

Ser His Arg Met Gln Pro Arg Gly Ser Phe Tyr Ser Met Val Pro Asn

100

105

110

Ala Thr Ile His Gln Asp Pro Gln Ser Ile Phe Val Thr Asn Pro Val

115

120

125

Thr Leu Thr Pro Pro Gln Gly Pro Pro Ala Ala Val Gln Leu Ser Ser

130

135

140

Ala Val Asn Ile Met Asn Gly Ser Gln Met His Ile Asn Pro Ala Asn

145                      150                      155                      160  
Lys Ser Leu Pro Pro Thr Phe Gly Pro Ala Thr Leu Phe Asn His Phe  
                                 165                      170                      175  
Ser Ser Leu Phe Asp Ser Ser Gln Val Pro Ala Asn Gln Gly Trp Gly  
                                 180                      185                      190  
Asp Gly Pro Leu Ser Ser Arg Val Ala Thr Asp Ala Ser Phe Thr Val  
                                 195                      200                      205  
Gln Ser Ala Phe Leu Gly Asn Ser Val Leu Gly His Leu Glu Asn Met  
                                 210                      215                      220  
His Pro Asp Asn Ser Lys Ala Pro Gly Phe Arg Pro Pro Ser Gln Arg  
225                      230                      235                      240  
Val Ser Thr Ser Pro Val Gly Leu Pro Ser Ile Asp Pro Ser Gly Ser  
                                 245                      250                      255  
Ser Pro Ser Ser Ser Ser Ala Pro Leu Ala Ser Phe Ser Gly Ile Pro  
                                 260                      265                      270  
Gly Thr Arg Val Phe Leu Gln Gly Pro Ala Pro Val Gly Thr Pro Ser  
                                 275                      280                      285  
Phe Asn Arg Gln His Phe Ser Pro His Pro Trp Thr Ser Ala Ser Asn  
                                 290                      295                      300  
Ser Cys Asp Ser Pro Ile Pro Ser Val Ser Ser Gly Ser Ser Ser Pro  
305                      310                      315                      320  
Leu Ser Ala Thr Ser Ala Pro Pro Thr Leu Gly Gln Pro Lys Gly Val  
                                 325                      330                      335  
Ser Ala Ser Gln Asp Arg Lys Ile Pro Pro Pro Ile Gly Thr Glu Arg  
                                 340                      345                      350  
Leu Ala Arg Ile Arg Gln Gly Gly Ser Val Ala Gln Ala Pro Ala Gly  
                                 355                      360                      365  
Thr Ser Phe Val Ala Pro Val Gly His Ser Gly Ile Trp Ser Phe Gly  
                                 370                      375                      380

Val Asn Ala Val Ser Glu Gly Leu Ser Gly Trp Ser Gln Ser Val Met			
385	390	395	400
Gly Asn His Pro Met His Gln Gln Leu Ser Asp Pro Ser Thr Phe Ser			
	405	410	415
Gln His Gln Pro Met Glu Arg Asp Asp Ser Gly Met Val Ala Pro Ser			
	420	425	430
Asn Ile Phe His Gln Pro Met Gly Leu Pro Ile Ser Met Tyr Gly Gly			
	435	440	445
Thr Ile Ile Pro Ser His Pro Gln Leu Ala Asp Val Pro Gly Gly Pro			
	450	455	460
Leu Phe Asn Gly Leu His Asn Pro Asp Pro Ala Trp Asn Pro Met Ile			
465	470	475	480
Lys Val Ile Gln Asn Ser Thr Glu Cys Thr Asp Ala Gln Gln Ala Ser			
	485	490	495
Leu Leu Pro Ser Val Pro Ala Leu Lys Gly Glu Ile Pro Ser Pro Gln			
	500	505	510
Leu Thr Arg Pro Lys Lys Arg Ile Gly Arg Pro Met Val Ala Ser Pro			
	515	520	525
Asn Gln Arg His Gln Asp His Leu Arg Pro Lys Val Pro Ala Gly Val			
	530	535	540
Gln Glu Leu Thr His Cys Pro Asp Thr Pro Leu Leu Pro Pro Ser Asp			
545	550	555	560
Ser Arg Gly His Asn Ser Ser Asn Ser Pro Ser Leu Gln Ala Gly Gly			
	565	570	575
Ala Glu Gly Ala Gly Asp Arg Gly Arg Asp Thr Arg			
	580	585	

&lt;210&gt; 3648

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3648

Met Phe Leu Ser Leu Lys Met Phe Cys Trp Gly Arg His Ala Met Val

1 5 10 15

Leu Arg Ile Ala Pro Phe Ser Asp Asp Leu Leu Leu Thr Ser Asp Thr

20 25 30

Tyr Arg Asp Ser Ala Gly Ala Cys Gln Ser Ser Asn Thr Ser Arg Asn

35 40 45

Val Arg Ile Trp Asp Arg Arg Ser Gln Asp Ile His Leu Ala Leu Phe

50 55 60

Trp Glu Glu Glu Ile His Phe Leu Ala Cys Ala Gly Trp Leu Thr Pro

65 70 75 80

Val Ile Pro Gly Arg Trp Asp Tyr Gly Cys Glu Pro Pro His Pro Ala

85 90 95

Cys Phe Thr Ser Phe Asn Ser Val Thr Val Asp Asp Val Pro His Arg

100 105 110

Pro Ala Ser His Ala Thr Cys Glu Ser

115 120

&lt;210&gt; 3649

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3649



Met	Val	Ala	Glu	Glu	Gly	Ser	Arg	Cys	Leu	Tyr	Pro	Gly	Gln	Leu	Phe
1				5					10					15	
Leu	Leu	Leu	His	Phe	Pro	Val	Val	Gly	Gln	Cys	Trp	His	Cys	Glu	Arg
			20					25					30		
Cys	Glu	Gly	Tyr	Asn	Tyr	Gln	Val	Asp	Glu	Leu	Ser	Cys	Glu	Leu	Cys
		35					40					45			
Pro	Leu	Asp	Gln	Arg	Pro	Asn	Met	Asn	Arg	Thr	Gly	Cys	Gln	Leu	Ile
	50					55					60				
Pro	Ile	Ile	Lys	Leu	Glu	Trp	His	Ser	Pro	Trp	Ala	Val	Val	Pro	Val
65				70						75				80	
Phe	Val	Ala	Ile	Leu	Gly	Ile	Ile	Ala	Thr	Thr	Phe	Val	Ile	Val	Thr
			85					90					95		
Phe	Val	Arg	Tyr	Asn	Asp	Thr	Pro	Ile	Val	Arg	Ala	Ser	Gly	Arg	Glu
		100						105					110		
Leu	Ser	Tyr	Val	Leu	Leu	Thr	Gly	Ile	Phe	Leu	Cys	Tyr	Ser	Ile	Thr
		115					120					125			
Phe	Leu	Met	Ile	Ala	Ala	Pro	Asp	Thr	Ile	Ile	Cys	Ser	Phe	Arg	Arg
	130					135					140				
Val	Phe	Leu	Gly	Leu	Gly	Met	Cys	Phe	Ser	Tyr	Ala	Ala	Leu	Leu	Thr
145				150						155				160	
Lys	Thr	Asn	Arg	Ile	His	Arg	Ile	Phe	Glu	Gln	Gly	Lys	Lys	Ser	Val
			165					170					175		
Thr	Ala	Pro	Lys	Phe	Ile	Ser	Pro	Ala	Ser	Gln	Leu	Val	Ile	Thr	Phe
		180						185					190		
Ser	Leu	Ile	Ser	Val	Gln	Leu	Leu	Gly	Val	Phe	Val	Trp	Phe	Val	Val
		195					200					205			
Asp	Pro	Pro	His	Ile	Ile	Ile	Asp	Tyr	Gly	Glu	Gln	Arg	Thr	Leu	Asp
	210					215					220				
Pro	Glu	Lys	Ala	Arg	Gly	Val	Leu	Lys	Cys	Asp	Ile	Ser	Asp	Leu	Ser

225                      230                      235                      240  
 Leu Ile Cys Ser Leu Gly Tyr Ser Ile Leu Leu Met Val Thr Cys Thr  
                          245                      250                      255  
 Val Tyr Ala Ile Lys Thr Arg Gly Val Pro Glu Thr Phe  
                          260                      265

<210> 3650

<211> 540

<212> PRT

<213> Homo sapiens

<400> 3650

Met Arg Ala Leu Asp Asp Met Asp His Glu Gly Arg Asp Thr Leu Ala  
   1                      5                      10                      15  
 Arg Glu Glu Leu Arg Gln Gly Leu Ser Glu Leu Pro Ala Ile His Asp  
                          20                      25                      30  
 Leu His Gln Gly Ile Leu Glu Glu Leu Glu Glu Arg Leu Ser Asn Trp  
                          35                      40                      45  
 Glu Ser Gln Gln Lys Val Ala Asp Val Phe Leu Ala Arg Glu Gln Gly  
                          50                      55                      60  
 Phe Asp His His Ala Thr His Ile Leu Gln Phe Asp Arg Tyr Leu Gly  
   65                      70                      75                      80  
 Leu Leu Ser Glu Asn Cys Leu His Ser Pro Arg Leu Ala Ala Ala Val  
                          85                      90                      95  
 Arg Glu Phe Glu Gln Ser Val Gln Gly Gly Ser Gln Thr Ala Lys His  
                          100                      105                      110  
 Arg Leu Leu Arg Val Val Gln Arg Leu Phe Gln Tyr Gln Val Leu Leu  
                          115                      120                      125

Thr Asp Tyr Leu Asn Asn Leu Cys Pro Asp Ser Ala Glu Tyr Asp Asn  
130 135 140  
Thr Gln Gly Ala Leu Ser Leu Ile Ser Lys Val Thr Asp Arg Ala Asn  
145 150 155 160  
Asp Ser Met Glu Gln Gly Glu Asn Leu Gln Lys Leu Val His Ile Glu  
165 170 175  
His Ser Val Arg Gly Gln Gly Asp Leu Leu Gln Pro Gly Arg Glu Phe  
180 185 190  
Leu Lys Glu Gly Thr Leu Met Lys Val Thr Gly Lys Asn Arg Arg Pro  
195 200 205  
Arg His Leu Phe Leu Met Asn Asp Val Leu Leu Tyr Thr Tyr Pro Gln  
210 215 220  
Lys Asp Gly Lys Tyr Arg Leu Lys Asn Thr Leu Ala Val Ala Asn Met  
225 230 235 240  
Lys Val Ser Arg Pro Val Met Glu Lys Val Pro Tyr Ala Leu Lys Ile  
245 250 255  
Glu Thr Ser Glu Ser Cys Leu Met Leu Ser Ala Ser Ser Cys Ala Glu  
260 265 270  
Arg Asp Glu Trp Tyr Gly Cys Leu Ser Arg Ala Leu Pro Glu Asp Tyr  
275 280 285  
Lys Ala Gln Ala Leu Ala Ala Phe His His Ser Val Glu Ile Arg Glu  
290 295 300  
Arg Leu Gly Val Ser Leu Gly Glu Arg Pro Pro Thr Leu Val Pro Val  
305 310 315 320  
Thr His Val Met Met Cys Met Asn Cys Gly Cys Asp Phe Ser Leu Thr  
325 330 335  
Leu Arg Arg His His Cys His Ala Cys Gly Lys Ile Val Cys Arg Asn  
340 345 350  
Cys Ser Arg Asn Lys Tyr Pro Leu Lys Tyr Leu Lys Asp Arg Met Ala

355 360 365  
Lys Val Cys Asp Gly Cys Phe Gly Glu Leu Lys Lys Arg Gly Arg Ala  
370 375 380  
Val Pro Gly Leu Met Arg Glu Arg Pro Val Ser Met Ser Phe Pro Leu  
385 390 395 400  
Ser Ser Pro Arg Phe Ser Gly Ser Ala Phe Ser Ser Val Phe Gln Ser  
405 410 415  
Ile Asn Pro Ser Thr Phe Lys Lys Gln Lys Lys Val Pro Ser Ala Leu  
420 425 430  
Thr Glu Val Ala Ala Ser Gly Glu Gly Ser Ala Ile Ser Gly Tyr Leu  
435 440 445  
Ser Arg Cys Lys Arg Gly Lys Arg His Trp Lys Lys Leu Trp Phe Val  
450 455 460  
Ile Lys Gly Lys Val Leu Tyr Thr Tyr Met Ala Ser Glu Asp Lys Val  
465 470 475 480  
Ala Leu Glu Ser Met Pro Leu Leu Gly Phe Thr Ile Ala Pro Glu Lys  
485 490 495  
Glu Glu Gly Ser Ser Glu Val Gly Pro Ile Phe His Leu Tyr His Lys  
500 505 510  
Lys Thr Leu Phe Tyr Ser Phe Lys Ala Glu Asp Thr Asn Ser Ala Gln  
515 520 525  
Arg Trp Ile Glu Ala Met Glu Asp Ala Ser Val Leu  
530 535 540

&lt;210&gt; 3651

&lt;211&gt; 244

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3651

Met Pro Arg Gly Phe His Asn Asn Asn Ile Lys Ala Ile Pro Glu Lys  
 1 5 10 15  
 Ala Phe Met Gly Asn Pro Leu Leu Gln Thr Ile His Phe Tyr Asp Asn  
 20 25 30  
 Pro Ile Gln Phe Val Gly Arg Ser Ala Phe Gln Tyr Leu Pro Lys Leu  
 35 40 45  
 His Thr Leu Ser Leu Asn Gly Ala Met Asp Ile Gln Glu Phe Pro Asp  
 50 55 60  
 Leu Lys Gly Thr Thr Ser Leu Glu Ile Leu Thr Leu Thr Arg Ala Gly  
 65 70 75 80  
 Ile Arg Leu Leu Pro Ser Gly Met Cys Gln Gln Leu Pro Arg Leu Arg  
 85 90 95  
 Val Leu Glu Leu Ser His Asn Gln Ile Glu Glu Leu Pro Ser Leu His  
 100 105 110  
 Arg Cys Gln Lys Leu Glu Glu Ile Gly Leu Gln His Asn Arg Ile Trp  
 115 120 125  
 Glu Ile Gly Ala Asp Thr Phe Ser Gln Leu Ser Ser Cys Asp Ser Thr  
 130 135 140  
 Gln Ala Leu Val Ala Phe Ser Asp Val Asp Leu Ile Leu Glu Ala Ser  
 145 150 155 160  
 Glu Ala Gly Arg Pro Pro Gly Leu Glu Thr Tyr Gly Phe Pro Ser Val  
 165 170 175  
 Thr Leu Ile Ser Cys Gln Gln Pro Gly Ala Pro Arg Leu Glu Gly Ser  
 180 185 190  
 His Cys Val Glu Pro Glu Gly Asn His Phe Gly Asn Pro Gln Pro Ser  
 195 200 205  
 Met Asp Gly Glu Leu Leu Leu Arg Ala Glu Gly Ser Thr Pro Ala Gly

210	215	220
Gly Gly Leu Ser Gly Gly Gly Gly Phe Gln Pro Ser Gly Leu Ala Phe		
225	230	235
240		
Ala Ser His Val		

&lt;210&gt; 3652

&lt;211&gt; 477

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3652

Met Ala His Asn Pro Asn Met Thr His Leu Lys Ile Asn Leu Pro Val		
1	5	10
15		
Thr Ala Leu Pro Pro Leu Trp Val Arg Cys Asp Ser Ser Asp Pro Glu		
20	25	30
Gly Thr Cys Trp Leu Gly Ala Glu Leu Ile Thr Thr Asn Asn Ser Ile		
35	40	45
Thr Gly Ile Val Leu Tyr Val Val Ser Cys Lys Ala Asp Lys Asn Tyr		
50	55	60
Ser Val Asn Leu Glu Asn Leu Lys Asn Leu His Lys Lys Arg His His		
65	70	75
80		
Leu Ser Thr Val Thr Ser Lys Gly Phe Ala Gln Tyr Glu Leu Phe Lys		
85	90	95
Ser Ser Ala Leu Asp Asp Thr Ile Thr Ala Ser Gln Thr Ala Ile Ala		
100	105	110
Leu Asp Ile Ser Trp Ser Pro Val Asp Glu Ile Leu Gln Ile Pro Pro		
115	120	125

Leu Ser Ser Thr Ala Thr Leu Asn Ile Lys Val Glu Ser Gly Glu Pro  
130 135 140  
Arg Gly Pro Leu Asn His Leu Tyr Arg Glu Leu Lys Phe Leu Leu Val  
145 150 155 160  
Leu Ala Asp Gly Leu Arg Thr Gly Val Thr Glu Trp Leu Glu Pro Leu  
165 170 175  
Glu Ala Lys Ser Ala Val Glu Leu Val Gln Glu Phe Leu Asn Asp Leu  
180 185 190  
Asn Lys Leu Asp Gly Phe Gly Asp Ser Thr Lys Lys Asp Thr Glu Val  
195 200 205  
Glu Thr Leu Lys His Asp Thr Ala Ala Val Asp Arg Ser Val Lys Arg  
210 215 220  
Leu Phe Lys Val Arg Ser Asp Leu Asp Phe Ala Glu Gln Leu Trp Cys  
225 230 235 240  
Lys Met Ser Ser Ser Val Ile Ser Tyr Gln Asp Leu Val Lys Cys Phe  
245 250 255  
Thr Leu Ile Ile Gln Ser Leu Gln Arg Gly Asp Ile Gln Pro Trp Leu  
260 265 270  
His Ser Gly Ser Asn Ser Leu Leu Ser Lys Leu Ile His Gln Ser Tyr  
275 280 285  
His Gly Thr Met Asp Thr Val Ser Leu Ser Gly Thr Ile Pro Val Gln  
290 295 300  
Met Leu Leu Glu Ile Gly Leu Asp Lys Leu Lys Lys Asp Tyr Ile Ser  
305 310 315 320  
Phe Phe Ile Gly Gln Glu Leu Ala Ser Leu Asn His Leu Glu Tyr Phe  
325 330 335  
Ile Ala Pro Ser Val Asp Ile Gln Glu Gln Val Tyr Arg Val Gln Lys  
340 345 350  
Leu His His Ile Leu Glu Ile Leu Val Ser Cys Met Pro Phe Ile Lys

355                                      360                                      365  
 Ser Gln His Glu Leu Leu Phe Ser Leu Thr Gln Ile Cys Ile Lys Tyr  
 370                                      375                                      380  
 Tyr Lys Gln Asn Pro Leu Asp Glu Gln His Ile Phe Gln Leu Pro Val  
 385                                      390                                      395                                      400  
 Arg Pro Thr Ala Val Lys Asn Leu Tyr Gln Ser Glu Lys Pro Gln Lys  
 405                                      410                                      415  
 Trp Arg Val Glu Ile Tyr Ser Gly Gln Lys Lys Ile Lys Thr Val Trp  
 420                                      425                                      430  
 Gln Leu Ser Asp Ser Ser Pro Ile Asp His Leu Asn Phe His Lys Pro  
 435                                      440                                      445  
 Asp Phe Ser Glu Leu Thr Leu Asn Gly Ser Leu Glu Glu Arg Ile Phe  
 450                                      455                                      460  
 Phe Thr Asn Met Val Thr Cys Ser Gln Val His Phe Lys  
 465                                      470                                      475

&lt;210&gt; 3653

&lt;211&gt; 486

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3653

Met Leu Gly Glu Gly Ile Lys Glu Arg Gln Arg Arg Ile Lys Glu Phe  
 1                                      5                                      10                                      15  
 Gln Glu Lys Ile Asp Lys Val Glu Asp Asp Ile Phe Gln His Phe Cys  
 20                                      25                                      30  
 Glu Glu Ile Gly Val Glu Asn Ile Arg Glu Phe Glu Asn Lys His Val  
 35                                      40                                      45



Lys Arg Gln Gln Glu Ile Asp Gln Lys Arg Leu Glu Phe Glu Lys Gln  
 50 55 60  
 Lys Thr Arg Leu Asn Val Gln Leu Glu Tyr Ser Arg Ser His Leu Lys  
 65 70 75 80  
 Lys Lys Leu Asn Lys Ile Asn Thr Leu Lys Glu Thr Ile Gln Lys Gly  
 85 90 95  
 Ser Glu Asp Ile Asp His Leu Lys Lys Ala Glu Glu Asn Cys Leu Gln  
 100 105 110  
 Thr Val Asn Glu Leu Met Ala Lys Gln Gln Gln Leu Lys Asp Ile Arg  
 115 120 125  
 Val Thr Gln Asn Ser Ser Ala Glu Lys Val Gln Thr Gln Ile Glu Glu  
 130 135 140  
 Glu Arg Lys Lys Phe Leu Ala Val Asp Arg Glu Val Gly Lys Leu Gln  
 145 150 155 160  
 Lys Glu Val Val Ser Ile Gln Thr Ser Leu Glu Gln Lys Arg Leu Glu  
 165 170 175  
 Lys His Asn Leu Leu Leu Asp Cys Lys Val Gln Asp Ile Glu Ile Ile  
 180 185 190  
 Leu Leu Ser Gly Ser Leu Asp Asp Ile Ile Glu Val Glu Met Gly Thr  
 195 200 205  
 Glu Ala Glu Ser Thr Gln Ala Thr Ile Asp Ile Tyr Glu Lys Glu Glu  
 210 215 220  
 Ala Phe Glu Ile Asp Tyr Ser Ser Leu Lys Glu Asp Leu Lys Ala Leu  
 225 230 235 240  
 Gln Ser Asp Gln Glu Ile Glu Ala His Leu Arg Leu Leu Leu Gln Gln  
 245 250 255  
 Val Ala Ser Gln Glu Asp Ile Leu Leu Lys Thr Ala Ala Pro Asn Leu  
 260 265 270  
 Arg Ala Leu Glu Asn Leu Lys Thr Val Arg Asp Lys Phe Gln Glu Ser

275 280 285  
Thr Asp Ala Phe Glu Ala Ser Arg Lys Glu Ala Arg Met Cys Arg Gln  
290 295 300  
Glu Phe Glu Gln Val Lys Lys Arg Arg Tyr Asp Leu Phe Thr Gln Cys  
305 310 315 320  
Phe Glu His Val Ser Ile Ser Ile Asp Gln Ile Tyr Lys Lys Leu Cys  
325 330 335  
Arg Asn Asn Ser Ala Gln Ala Phe Leu Ser Pro Glu Asn Pro Glu Glu  
340 345 350  
Pro Tyr Leu Glu Gly Ile Ser Tyr Asn Cys Val Ala Pro Gly Lys Arg  
355 360 365  
Phe Met Pro Met Asp Asn Leu Ser Gly Gly Glu Lys Cys Val Ala Ala  
370 375 380  
Leu Ala Leu Leu Phe Ala Val His Ser Phe Arg Pro Ala Pro Phe Phe  
385 390 395 400  
Val Leu Asp Glu Val Asp Ala Ala Leu Asp Asn Thr Asn Ile Gly Lys  
405 410 415  
Val Ser Ser Tyr Ile Lys Glu Gln Thr Gln Asp Gln Phe Gln Met Ile  
420 425 430  
Val Ile Ser Leu Lys Glu Glu Phe Tyr Ser Arg Ala Asp Ala Leu Ile  
435 440 445  
Gly Ile Tyr Pro Glu Tyr Asp Asp Cys Met Phe Ser Arg Val Leu Thr  
450 455 460  
Leu Asp Leu Ser Gln Tyr Pro Asp Thr Glu Gly Gln Glu Ser Ser Lys  
465 470 475 480  
Arg His Gly Glu Ser Arg  
485

&lt;210&gt; 3654

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3654

Met Gly Asn His Glu Leu Met Thr Ser Trp Leu Leu Asp Val Arg Lys

1 5 10 15

Asn Leu Gln Ser Gln Arg Glu Leu Ser Lys Phe Cys Pro Glu Gln Thr

20 25 30

Glu Gly Trp Arg Cys His Arg Leu Arg Trp Glu Asn Gly Arg Cys His

35 40 45

Arg Leu Gln Gly Lys Val Gly Asp Gln Leu Arg Ala Pro Glu Pro Ser

50 55 60

Trp Lys Glu Phe Pro Ile Gln Pro Ala Ser Val Ser Ala Ser Val Leu

65 70 75 80

Phe Leu Met Thr Leu Arg Val Leu Ala Ser Gly Ser Phe Met Met Gln

85 90 95

Arg Val Pro Pro Ser His Pro Gly Arg Leu Arg Ala Pro Ala Ser Ser

100 105 110

Trp Gln Pro Gly Ala Arg Leu Arg Ile Trp Arg Pro Thr Thr Gly Trp

115 120 125

Ser Leu Ala Ala Thr Ser Gln Arg Arg Val Ser Ser Pro Val Val Ser

130 135 140

Cys Gly Arg Val Ala Val Thr Arg Ser Arg Thr Arg Asp Ser Trp Pro

145 150 155 160

Trp Cys Pro Ser Arg Ser Pro Arg Cys Val Ala Cys Arg Leu Phe Phe

165 170 175

&lt;210&gt; 3655

&lt;211&gt; 470

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3655

Met Arg Gly His Lys Gly Ala Lys Gly Glu Ile Gly Glu Pro Gly Arg

1 5 10 15

Gln Gly His Lys Gly Glu Glu Gly Asp Gln Gly Glu Leu Gly Glu Val

20 25 30

Gly Ala Gln Gly Pro Pro Gly Ala Gln Gly Leu Arg Gly Ile Thr Gly

35 40 45

Ile Val Gly Asp Lys Gly Glu Lys Gly Ala Arg Gly Leu Asp Gly Glu

50 55 60

Pro Gly Pro Gln Gly Leu Pro Gly Ala Pro Gly Asp Gln Gly Gln Arg

65 70 75 80

Gly Pro Pro Gly Glu Ala Gly Pro Lys Gly Asp Arg Gly Ala Glu Gly

85 90 95

Ala Arg Gly Ile Pro Gly Leu Pro Gly Pro Lys Gly Asp Thr Gly Leu

100 105 110

Pro Gly Val Asp Gly Arg Asp Gly Ile Pro Gly Met Pro Gly Thr Lys

115 120 125

Gly Glu Pro Gly Lys Pro Gly Pro Gly Asp Ala Gly Leu Gln Gly

130 135 140

Leu Pro Gly Val Pro Gly Ile Pro Gly Ala Lys Gly Val Ala Gly Glu

145 150 155 160

Lys Gly Ser Thr Gly Ala Pro Gly Lys Pro Gly Gln Met Gly Asn Ser

165 170 175

Gly Lys Pro Gly Gln Gln Gly Pro Pro Gly Glu Val Gly Pro Arg Gly  
180 185 190  
Pro Gln Gly Leu Pro Gly Ser Arg Gly Glu Leu Gly Pro Val Gly Ser  
195 200 205  
Pro Gly Leu Pro Gly Lys Leu Gly Val Val Gly Glu Pro Gly Pro Lys  
210 215 220  
Gly Glu Gln Gly Ala Ser Gly Glu Glu Gly Glu Ala Gly Glu Arg Gly  
225 230 235 240  
Glu Leu Gly Asp Ile Gly Leu Pro Gly Pro Lys Gly Ser Ala Gly Asn  
245 250 255  
Pro Gly Glu Pro Gly Leu Arg Gly Pro Glu Gly Ser Arg Gly Leu Pro  
260 265 270  
Gly Val Glu Gly Pro Arg Gly Pro Pro Gly Pro Arg Gly Val Gln Gly  
275 280 285  
Glu Gln Gly Ala Thr Gly Leu Pro Gly Val Gln Gly Pro Pro Gly Arg  
290 295 300  
Ala Pro Thr Asp Gln His Ile Lys Gln Val Cys Met Arg Val Ile Gln  
305 310 315 320  
Glu His Phe Ala Glu Met Ala Ala Ser Leu Lys Arg Pro Asp Ser Gly  
325 330 335  
Ala Thr Gly Leu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro  
340 345 350  
Pro Gly Glu Asn Gly Phe Pro Gly Gln Met Gly Ile Arg Gly Leu Pro  
355 360 365  
Gly Ile Lys Gly Pro Pro Gly Ala Leu Gly Leu Arg Gly Pro Lys Gly  
370 375 380  
Asp Leu Gly Glu Lys Gly Glu Arg Gly Pro Pro Gly Arg Gly Pro Asn  
385 390 395 400  
Gly Leu Pro Gly Ala Ile Gly Leu Pro Gly Asp Pro Gly Pro Ala Ser

405 410 415  
 Tyr Gly Arg Asn Gly Arg Asp Gly Glu Arg Gly Pro Pro Gly Val Ala  
 420 425 430  
 Gly Ile Pro Gly Val Pro Gly Pro Pro Gly Pro Pro Gly Leu Pro Gly  
 435 440 445  
 Phe Cys Glu Pro Ala Ser Cys Thr Met Gln Ala Gly Gln Arg Ala Phe  
 450 455 460  
 Asn Lys Gly Pro Asp Pro  
 465 470

&lt;210&gt; 3656

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3656

Met His Glu Pro Leu Cys Pro Ala Ser Cys Cys Phe Tyr Thr Phe Ser  
 1 5 10 15  
 Ile Ala Ile Thr Val Phe Asp Gly Ser Phe Cys Phe Phe Glu Phe Leu  
 20 25 30  
 Ile Phe Ile Thr Pro Ala Ser Ser Ala Thr Leu Lys Asp Leu Glu Ser  
 35 40 45  
 Ser Ser Arg Cys Glu Ala Val Leu Lys Arg Gln Leu Trp Gln Ser Ile  
 50 55 60  
 Lys Ala Arg Ala Gln Leu Glu Ala His Val Thr Gln Met Leu Glu Gln  
 65 70 75 80  
 Val Gln Leu Glu Thr Asp Glu Tyr Thr Gln His Leu Lys Gly Glu Arg  
 85 90 95

Ala Arg Trp Gln Gln Arg Val Trp Lys Met Ser Glu Glu Val Cys Thr  
 100 105 110  
 Trp Lys Glu Glu Lys Lys His Asp Arg His Arg Val Gln Glu Leu Glu  
 115 120 125  
 Arg Ser Leu Ala Glu Leu Lys Asn  
 130 135

<210> 3657

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3657

Met Leu Lys Val Ser Ile Trp Ser Ala Phe Gly Pro Met Leu Asn Leu  
 1 5 10 15  
 Phe Asn Ser Ile Leu Tyr Arg Ser Asn Ile Val Pro Glu Ser Ala Glu  
 20 25 30  
 Ala Ala Arg Lys Glu Val Ser Ser Arg Thr Lys Leu His Ile Phe Leu  
 35 40 45  
 Gly Arg Ser Ala Ser Leu Leu Arg Pro Asn Gly His Ser Leu Ala Arg  
 50 55 60  
 Trp Leu Glu Thr Thr Val Leu Glu Arg Thr Gln Gly Lys Ile Ser Arg  
 65 70 75 80  
 Arg Asn Pro Asn Arg Lys Ile Tyr Phe Ile His Phe Leu Gln Lys Met  
 85 90 95  
 His Pro Ile Ile Ala Tyr Ser Pro Pro Thr Trp Thr Ala His Ser Val  
 100 105 110  
 Asn His Val Leu Gln Val Arg Phe Gly Tyr

115

120

&lt;210&gt; 3658

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3658

Met Lys Pro His Ala Glu Gln Ile Gln Leu Leu Gly Lys Gln Gly Ala  
1 5 10 15  
Ala Val Ser Gln Leu Cys Pro Leu Val Leu Val Ser Gly His Ile Cys  
20 25 30  
Arg Glu Glu Arg Arg His Phe Gln Arg Ile Ala Leu Thr Ala Ser Ser  
35 40 45  
Leu Ser Cys Gly Ser Gln Leu Lys Trp His Leu Leu Gln Glu Ala Phe  
50 55 60  
Pro Asp Phe Leu Pro Phe Ser Val Leu Pro Val Ser Trp Thr Ala Arg  
65 70 75 80  
Ala Thr Asp Val Leu Ala Leu Ser Val Asp Met Ala Cys Ser Leu Leu  
85 90 95  
Pro His Trp Thr Gly His Ser Ala Arg Ala Lys Thr Val Phe Gly Pro  
100 105 110  
Ser Leu Trp Leu Gln Leu Cys Leu Ala Gln Val Gln Ala Gln Tyr Gly  
115 120 125  
Cys Ser Leu Met Phe Ala Glu  
130 135



<210> 3659

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3659

Met Ser His Arg Ala Trp Leu Ile Leu Ala Phe Phe Phe Ile Phe Tyr

1                      5                      10                      15

Tyr Phe Phe Lys Ile Glu Ser Cys Ser Val Ala Gln Ala Gly Val Gln

20                      25                      30

Trp His Ser Leu Ser Ser Val Gln Pro Pro Pro Pro Arg Phe Lys Gln

35                      40                      45

Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Asn Arg His Met Pro

50                      55                      60

Pro Arg Leu Arg Leu Ile Val Gly Gly Arg Ala Cys Ile Ile Val Pro

65                      70                      75                      80

Leu His Ser Ser Leu Gly Asn Arg Ala Arg Leu Cys Leu Pro Asn Lys

85                      90                      95

Ala Glu Lys Asp Tyr Leu Arg Glu

100

<210> 3660

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3660

Met Ser Lys Lys His Gln Asn Asp Cys Thr Cys Asp Arg Ser Cys Lys

1	5	10	15
Asn Asn Ala Thr Lys Gly Phe Pro Thr Thr Ser Arg Met Gln Thr Arg			
20	25	30	
Lys Phe Gly Pro Lys Ala Leu Leu Phe Leu Tyr Val Arg Met Pro Asn			
35	40	45	
Ser Leu Ala Gly Lys Arg Pro Ile Met Gln Ile Lys Tyr Thr Ser Asn			
50	55	60	
Phe Ser Pro Glu Lys Gln Leu Trp Leu Gln Val Leu Leu Lys Gln Ala			
65	70	75	80
Leu Gln Gln Arg Cys Tyr Ser Leu Ala Leu Arg Arg Asn Lys Asn Ser			
85	90	95	
Pro Ser Glu Val Tyr Glu Arg Val Arg Asn Cys Glu			
100	105		

&lt;210&gt; 3661

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3661

Met Ser Pro Leu Pro Ser Thr Leu Pro Gln Gly Thr Ser Cys Pro Ala			
1	5	10	15
Leu Pro Leu Leu Leu Pro Gly Arg Pro Cys Ala Ala Ala Leu Phe Val			
20	25	30	
Arg His Pro Phe Pro Gly Val Pro Leu Ser Phe Pro Leu Thr Leu Leu			
35	40	45	
Ile Ala Leu Leu Ser Ser Pro Leu Tyr Ser Ser Pro His Ser Leu Ser			
50	55	60	

Ser His Pro Gln Pro Asp Leu Thr Ala Cys Lys Ser His Pro Gly Glu  
 65 70 75 80  
 Met Val Ser Leu Leu Leu Gly Gln Phe Pro Gly Gly Pro Glu Leu Pro  
 85 90 95  
 Gly Leu Val Asp Ser Gln Gln Arg Pro Gly Arg His Gly Glu Ser Lys  
 100 105 110  
 Thr Met Ala Ser Glu His Ser Ala Trp Pro Ala Pro Phe Leu Ser Cys  
 115 120 125  
 Leu Gly Ser Gln Thr Ala Gln Ala Ser Ala Phe Glu Leu Ala Ser Pro  
 130 135 140  
 Trp Asn Leu Val Cys Asn His Gly Ala Asn Cys Arg Thr Arg Gly Arg  
 145 150 155 160  
 Glu Gly Arg Gly Val Lys Ser Ile Glu Ser Val Leu Lys Glu Gly Gly  
 165 170 175  
 Asp Trp Thr Thr  
 180

&lt;210&gt; 3662

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3662

Met Arg Ala Pro Ala Gln Val Arg Thr Leu Arg Trp Ser Leu Gly Trp  
 1 5 10 15  
 Pro Gly Ser Arg Gly Arg Asp Val Phe Ala Ala Leu Arg Cys Ala Gln  
 20 25 30  
 Ala Leu Arg Cys Gln Pro Leu Gly Ser Ala Leu Pro Pro Gln Ala Pro

35 40 45  
Thr Arg Asp Leu Gly Arg Pro Gln Ala Phe Asp Ser Ser Arg Thr Pro  
50 55 60  
Gly Pro Arg Pro Pro Arg Ser Thr Leu Arg Met Met Glu Thr Lys Ser  
65 70 75 80  
Pro Thr Ser Pro Ser Tyr Gly Ala Arg Gly Lys Val Pro Pro Gly Ala  
85 90 95  
Gly Pro Gly Ser Pro Leu Ser Arg Gly Ala Gly Gln Gly Ala Pro Leu  
100 105 110  
Ser Glu Thr Arg Phe His His Val Ala Gln Ala Phe Leu Lys Leu Leu  
115 120 125  
Ser Ser Ser Asn Pro Pro Thr Ser Ala Ser Glu Ser Ala Arg Ile Ile  
130 135 140  
Gly Val Ser His Cys Thr Gln Pro Gln Val Ala Ser Leu Ser Asp Arg  
145 150 155 160  
His Cys Ser Lys Val Asn His Thr Val Leu Ser Pro Arg Lys Gly Val  
165 170 175  
Pro Leu Gln Leu Thr Ala Ala His Ser Ser Ser Gln Glu Val Leu Ala  
180 185 190  
Thr Val Pro Phe His Gly  
195

&lt;210&gt; 3663

&lt;211&gt; 461

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3663

Met Lys Glu Pro Leu Leu Gly Gly Glu Cys Asp Lys Ala Val Ala Ser  
 1 5 10 15  
 Gln Leu Gly Leu Leu Asp Glu Ile Lys Thr Glu Pro Asp Asn Ala Gln  
 20 25 30  
 Glu Tyr Cys His Arg Gln Gln Ser Arg Thr Gln Glu Asn Glu Leu Lys  
 35 40 45  
 Ile Asn Ala Val Phe Ser Glu Ser Ala Ser Gln Leu Thr Ala Gly Ile  
 50 55 60  
 Gln Leu Ser Leu Ala Ser Ser Gly Val Asn Lys Met Leu Pro Ser Val  
 65 70 75 80  
 Ser Thr Thr Ala Ile Gln Val Ser Cys Ala Gly Cys Lys Lys Ile Leu  
 85 90 95  
 Gln Lys Gly Gln Thr Ala Tyr Gln Arg Lys Gly Ser Ala Gln Leu Phe  
 100 105 110  
 Cys Ser Ile Pro Cys Ile Thr Glu Tyr Ile Ser Ser Ala Ser Ser Pro  
 115 120 125  
 Val Pro Ser Lys Arg Thr Cys Ser Asn Cys Ser Lys Asp Ile Leu Asn  
 130 135 140  
 Pro Lys Asp Val Ile Ser Val Gln Leu Glu Asp Thr Thr Ser Cys Lys  
 145 150 155 160  
 Thr Phe Cys Ser Leu Ser Cys Leu Ser Ser Tyr Glu Glu Lys Arg Lys  
 165 170 175  
 Pro Phe Val Thr Ile Cys Thr Asn Ser Ile Leu Thr Lys Cys Ser Met  
 180 185 190  
 Cys Gln Lys Thr Ala Ile Ile Gln Tyr Glu Val Lys Tyr Gln Asn Val  
 195 200 205  
 Lys His Asn Leu Cys Ser Asn Ala Cys Leu Ser Lys Phe His Ser Ala  
 210 215 220  
 Asn Asn Phe Ile Met Asn Cys Cys Glu Asn Cys Gly Thr Tyr Cys Tyr

225	230	235	240
Thr Ser Ser Ser Leu Ser His Ile Leu Gln Met Glu Gly Gln Ser His			
245	250	255	
Tyr Phe Asn Ser Ser Lys Ser Ile Thr Ala Tyr Lys Gln Lys Pro Ala			
260	265	270	
Lys Pro Leu Ile Ser Val Pro Cys Lys Pro Leu Lys Pro Ser Asp Glu			
275	280	285	
Met Ile Glu Thr Thr Ser Asp Leu Gly Lys Thr Glu Leu Phe Cys Ser			
290	295	300	
Ile Asn Cys Phe Ser Ala Tyr Ser Lys Ala Lys Met Glu Ser Ser Ser			
305	310	315	320
Val Ser Val Val Ser Val Val His Asp Thr Ser Thr Glu Leu Leu Ser			
325	330	335	
Pro Lys Lys Asp Thr Thr Pro Val Ile Ser Asn Ile Val Ser Leu Ala			
340	345	350	
Asp Thr Asp Val Ala Leu Pro Ile Met Asn Thr Asp Val Leu Gln Asp			
355	360	365	
Thr Val Ser Ser Val Thr Ala Thr Ala Asp Val Ile Val Asp Leu Ser			
370	375	380	
Lys Ser Ser Pro Ser Glu Pro Ser Asn Ala Val Ala Ser Ser Ser Thr			
385	390	395	400
Glu Gln Pro Ser Val Ser Pro Ser Ser Ser Val Phe Ser Gln His Ala			
405	410	415	
Ile Gly Ser Ser Thr Glu Val Gln Lys Asp Asn Met Lys Ser Met Lys			
420	425	430	
Ile Ser Asp Glu Leu Cys His Pro Lys Cys Thr Ser Lys Val Gln Lys			
435	440	445	
Val Lys Gly Lys Ser Arg Ser Ile Lys Lys Ser Cys Cys			
450	455	460	

&lt;210&gt; 3664

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3664

Met Phe Thr Trp Pro Ile Ser Arg Pro Arg Val Pro Leu Thr Arg Gly

1 5 10 15

Phe Phe Phe Phe Leu Phe Leu Phe Phe Phe Phe Leu Gln Gly Gly Ile

20 25 30

Met Gly Leu Trp Phe Phe Ser Pro Pro Thr Gly Arg Gly Ser Val Tyr

35 40 45

Val Ala Cys Gly Asn Arg Ile Gly Gly Asn Glu Leu Arg Phe Pro Arg

50 55 60

Val Gly Lys Arg Glu Val Lys Ser Gly Ala Thr Pro Pro Val Leu Trp

65 70 75 80

Arg Asn Ser Pro Asn Thr Glu Lys Lys Gly Ala Val Gly Val Leu Leu

85 90 95

Cys Leu Gln Val Arg Val Val Ser Ala Thr Gly Ala Arg His

100 105 110

&lt;210&gt; 3665

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3665

Met	Ala	Ser	Pro	Gln	Gly	Gly	Gln	Ile	Ala	Ile	Ala	Met	Arg	Leu	Arg
1				5				10						15	
Asn	Gln	Leu	Gln	Ser	Val	Tyr	Lys	Met	Asp	Pro	Leu	Arg	Asn	Glu	Glu
			20					25						30	
Glu	Val	Arg	Val	Lys	Ile	Lys	Asp	Leu	Asn	Glu	His	Ile	Val	Cys	Cys
			35					40						45	
Leu	Cys	Ala	Gly	Tyr	Phe	Val	Asp	Ala	Thr	Thr	Ile	Thr	Glu	Cys	Leu
			50					55						60	
His	Thr	Phe	Cys	Lys	Ser	Cys	Ile	Val	Lys	Tyr	Leu	Gln	Thr	Ser	Lys
			65					70						75	
Tyr	Cys	Pro	Met	Cys	Asn	Ile	Lys	Ile	His	Glu	Thr	Gln	Pro	Leu	Leu
								85						90	
Asn	Leu	Lys	Leu	Asp	Arg	Val	Met	Gln	Asp	Ile	Val	Tyr	Lys	Leu	Val
								100						105	
Pro	Gly	Leu	Gln	Asp	Ser	Glu	Glu	Lys	Arg	Ile	Arg	Glu	Phe	Tyr	Gln
								115						120	
Ser	Arg	Gly	Leu	Asp	Arg	Val	Thr	Gln	Pro	Thr	Gly	Glu	Glu	Pro	Ala
								130						135	
Leu	Ser	Asn	Leu	Gly	Leu	Pro	Phe	Ser	Ser	Phe	Asp	His	Ser	Lys	Ala
								145						150	
His	Tyr	Tyr	Arg	Tyr	Asp	Glu	Gln	Leu	Asn	Leu	Cys	Leu	Glu	Arg	Leu
								165						170	
Ser	Ser	Gly	Lys	Asp	Lys	Asn	Lys	Ser	Val	Leu	Gln	Asn	Lys	Tyr	Val
								180						185	
Arg	Cys	Ser	Val	Arg	Ala	Glu	Val	Arg	His	Leu	Arg	Arg	Val	Leu	Cys
								195						200	
His	Arg	Leu	Met	Leu	Asn	Pro	Gln	His	Val	Gln	Leu	Leu	Phe	Asp	Asn
								210						215	
															220



Glu Val Leu Pro Asp His Met Thr Met Lys Gln Ile Trp Leu Ser Arg  
 225                      230                      235                      240  
 Trp Phe Gly Lys Pro Ser Pro Leu Leu Leu Gln Tyr Ser Val Lys Glu  
                          245                      250                      255  
 Lys Arg Arg

<210> 3666

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3666

Met Lys Arg Thr Leu Glu Thr Met Arg Asn Thr Met Gly Glu Glu Thr  
 1                      5                      10                      15  
 Gly Glu Leu Trp Ser His Lys Pro Gly Phe Arg Ser Gln Phe Cys His  
                          20                      25                      30  
 Ser Pro Thr Glu Trp Pro Arg Thr Ala Phe Phe Arg Glu Gln Glu Gly  
                          35                      40                      45  
 Ala Ala Ser Leu Ser Ile Ala Trp Asp His Ile Gln Thr Gly Asp Val  
                          50                      55                      60  
 Ala Arg Ser Lys Ser Thr Ser Val Gly Ile Leu Val Asp Pro Gly Asp  
 65                      70                      75                      80  
 Pro Leu Leu Leu Arg Glu Leu Leu Arg Gly Leu Gly Tyr Asp Ser Arg  
                          85                      90                      95  
 Thr Lys Ser Phe Gly Arg Asp Phe Pro Ser Leu Asp Lys Glu Lys Glu  
                          100                      105                      110  
 Val Glu Leu Pro Ala Ala Ala Leu Gly Gly

115

120

&lt;210&gt; 3667

&lt;211&gt; 247

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3667

Met Leu Cys Val Tyr Phe Phe Lys Gly Ile Glu Asp Asn Asp Glu Leu

1 5 10 15

Pro Ser Ala Lys Gly Arg Lys Val Leu Arg Ser Leu Val Val Cys Glu

20 25 30

Asn Gly Leu Pro Ile Lys Glu Gly Leu Ser Cys Asn Gly Pro Arg Pro

35 40 45

Val Gly Leu Arg Ser Thr Leu Gln Gly Arg Gly Glu Met Val Glu Gln

50 55 60

Leu Arg Glu Leu Thr Arg Leu Leu Glu Ala Lys Asp Phe Arg Ser Arg

65 70 75 80

Met Glu Gly Val Gly Gln Leu Leu Glu Leu Cys Lys Ala Lys Thr Glu

85 90 95

Leu Val Thr Ala His Leu Val Gln Val Phe Asp Ala Phe Thr Pro Arg

100 105 110

Leu Gln Asp Ser Asn Lys Lys Val Asn Gln Trp Ala Leu Glu Ser Phe

115 120 125

Ala Lys Met Ile Pro Leu Leu Arg Glu Ser Leu His Pro Met Leu Leu

130 135 140

Ser Ile Ile Ile Thr Val Ala Asp Asn Leu Asn Ser Lys Asn Ser Gly

145 150 155 160

Ile Tyr Ala Ala Ala Val Ala Val Leu Asp Ala Met Val Glu Ser Leu  
                                 165                                170                                175  
 Asp Asn Leu Cys Leu Leu Pro Ala Leu Ala Gly Arg Val Arg Phe Leu  
                                 180                                185                                190  
 Ser Gly Arg Ala Val Leu Asp Val Thr Asp Arg Leu Ala Gly Glu His  
                                 195                                200                                205  
 Pro Gln Pro His Pro Thr Pro Ser Pro Gly Arg Phe Leu Phe Ser Pro  
                                 210                                215                                220  
 Gly Leu Trp Leu Asn His Ser Pro Ser Tyr Leu Arg Pro Glu Ile Ile  
                                 225                                230                                235                                240  
 Pro Pro Asn His Leu Lys Phe  
                                 245

<210> 3668

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3668

Met Arg Arg Asp Arg Gly Pro Lys Pro Ala Leu Gly Gly Ala Gly Glu  
           1                                5                                10                                15  
 Val Glu Pro Gly Gly Met Ala Ala Ser Pro Thr Gly Arg Pro Arg Arg  
                                 20                                25                                30  
 Leu Gln Arg Tyr Leu Gln Ser Gly Glu Phe Asp Gln Phe Arg Asp Phe  
                                 35                                40                                45  
 Pro Ile Phe Glu Ser Asn Phe Val Gln Val Thr Arg Leu Gly Glu Val  
                                 50                                55                                60  
 Ala Asn Glu Val Thr Met Gly Val Ala Ala Ser Ser Pro Ala Leu Glu

65                      70                      75                      80  
 Leu Pro Asp Leu Leu Leu Leu Ala Gly Pro Ala Lys Glu Asn Gly His  
                             85                      90                      95  
 Leu Gln Leu Phe Gly Leu Phe Pro Leu Lys Phe Val Gln Leu Phe Val  
                             100                      105                      110  
 His Asp Lys Ser Arg Cys Gln Leu Glu Val Lys Leu Asn Thr Ser Arg  
                             115                      120                      125  
 Thr Phe Tyr Leu Gln Leu Arg Ala Pro Leu Lys Thr Arg Asp Arg Glu  
                             130                      135                      140  
 Phe Gly Gln Trp Val Arg Leu Leu Tyr Arg Leu Arg Phe Leu Ser Ala  
 145                      150                      155                      160  
 Ser Ala Val Pro Phe Thr Gln Glu  
                             165

<210> 3669

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3669

Met Pro Val Cys Ser Ala Met Gly Arg Ile Leu Trp Met Lys Ala Lys  
   1                      5                      10                      15  
 Gly Ser Ala Asn Ser Ser Gln Leu Gly Ser Lys Thr Gly His Ser Gly  
                             20                      25                      30  
 Gly Gly Arg Asn Ser Pro Ser Gly Pro Gly Pro Pro Arg Gly Ser Ala  
                             35                      40                      45  
 Gly Arg Gly Pro Gly Cys Ser Val Val Ala Ala Ser Ile Thr Ala Gly  
                             50                      55                      60

Trp Ala Arg Ala Arg Arg Arg Trp Ala Pro Gly Pro Arg Leu Arg Ala  
 65                      70                      75                      80  
 Pro Leu Gly Pro Arg Pro Val Gln Thr Arg Leu Glu Gln Gln Gln Val  
                             85                      90                      95  
 Arg Val Val Arg Ala Thr Ala Ala Pro Trp Ala Phe Ser Ala Ser Asp  
                             100                      105                      110  
 Asp Asp Val Ser Pro Gln Ala His Ala Val Arg Leu Arg Arg His Gly  
                             115                      120                      125  
 Glu Glu Lys Glu Ser His Pro Thr Pro Ile Asp Pro Pro Ser Ala Arg  
                             130                      135                      140  
 Gly Ser Pro Pro Arg Pro Arg Ile Gly Arg Gly Arg Ala Phe Arg Cys  
 145                      150                      155                      160  
 Gly Trp Ser Leu Ser Leu Gly Phe Gln Leu Ser Gln Leu Leu Leu Thr  
                             165                      170                      175  
 Ile Tyr Tyr Val Ser Glu Phe Leu Pro  
                             180                      185

&lt;210&gt; 3670

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3670

Met Asn Glu Trp Gln Ser Trp Gly Leu Asn Leu Asp Leu Phe Asp Ser  
 1                      5                      10                      15  
 Ile Leu Leu Arg Thr Gln Leu His Glu Leu Cys Leu Ile Lys Ile Phe  
                             20                      25                      30  
 Gly Ala Phe Phe Phe Phe Ala Thr Lys Ser His Ser Val Thr Gln Ala

35                      40                      45  
 Gly Gly Ala Val Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser  
 50                      55                      60  
 Asn Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Thr His  
 65                      70                      75                      80  
 His His Ala Trp Leu Ile Phe Val Phe Leu Val Glu Ala Gly Phe His  
 85                      90                      95  
 His Val Gly Glu Ala Ser Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro  
 100                      105                      110  
 Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu Ser His His Thr  
 115                      120                      125  
 Trp Pro Phe Ser Val Ile Leu Thr Asn Thr  
 130                      135

&lt;210&gt; 3671

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3671

Met Met Trp Asp Phe Lys Lys Tyr Tyr Val Ser Asn Phe Ser Lys Gln  
 1                      5                      10                      15  
 Leu Leu Asp Ser Ile Trp His Gln Pro Ile Phe Asn Leu Leu Ser Ile  
 20                      25                      30  
 Gly Gln Ser Leu Tyr Ala Lys Ala Lys Glu Leu Asp Arg Val Lys Glu  
 35                      40                      45  
 Ile Gln Glu Gln Leu Phe His Ile Lys Lys Leu Leu Lys Thr Cys Arg  
 50                      55                      60



35                      40                      45  
 Pro Phe Pro Leu Cys Pro Pro Leu Ser Leu Thr Cys Pro Gln Gln Gln  
 50                      55                      60  
 Ser Cys Ile Pro Ser Ser Ser Gln Asp Val Leu Asn Ser Leu Trp Val  
 65                      70                      75                      80  
 Ser Ser His Cys Leu Gln Leu Lys Ile Ser Lys Thr Lys Thr His Cys  
 85                      90                      95  
 Leu Pro Thr Gln Asn Val Leu Pro Phe Leu Leu Pro Thr Pro Val Ser  
 100                      105                      110  
 Ile Val Cys Arg Leu Pro Gly Leu Asp Pro  
 115                      120

&lt;210&gt; 3673

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3673

Met Pro Val Ile Ala Ala Val Gly His Val Val Leu Trp Trp Met Pro  
 1                      5                      10                      15  
 Val Ile Ala Thr Val Gly Cys Val Val Leu Trp Trp Met Leu Val Ile  
 20                      25                      30  
 Ala Ala Val Gly Arg Val Val Leu Trp Trp Met Pro Val Ile Ala Ala  
 35                      40                      45  
 Val Gly Cys Val Val Leu Trp Trp Met Leu Val Ile Ala Thr Val Gly  
 50                      55                      60  
 Arg Val Val Leu Trp Trp Met Pro Val Ile Ala Ala Val Gly His Val  
 65                      70                      75                      80



Val Leu Trp Trp Val Leu Ile Gln Phe Arg Thr His Val Ala Leu Gly  
85 90 95  
Cys Leu Gly Pro Gln His Thr Gly Lys Leu Ile Ile Thr Gly Val Ala  
100 105 110  
Cys Ser Leu Ser Thr Ala His Pro Gln Leu  
115 120

<210> 3674

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3674

Met Gly Lys Val Arg Thr Ala Cys Pro Ala Gly Gly Trp Gly Cys Ser  
1 5 10 15  
Cys His Gln His Trp Ala Leu Ser Leu Gly Leu Arg Leu Ser Asp Arg  
20 25 30  
Thr Gly Ser Gln Gln Thr Asp Arg Trp Met Pro Gln Ala Leu His Leu  
35 40 45  
Val Pro Gly Ala Leu Leu Leu Pro His Pro Val Pro His Leu Glu Leu  
50 55 60  
Cys Ile Pro Glu Ala Val Thr Ala Gly Asp Gly Cys Leu Thr Cys Gln  
65 70 75 80  
Pro Met Gly Trp Ala Gly Ile Leu Glu Thr Ser Pro Ile Pro Asp Ile  
85 90 95  
Pro Leu Trp Ala Arg Gly Met Gly Val Asp Ser Gly  
100 105

&lt;210&gt; 3675

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3675

Met Ala Gly Ala Ala Arg Trp Val Gly Gln Glu Ser Ser Ala Met Val

1 5 10 15

Cys Phe Gly Cys Pro Gly Gly Ala Ser Ser Arg Cys Arg Ser Pro Arg

20 25 30

Gly Arg Gln Ala Ser Arg Val Pro Arg Leu Glu Asn Gly Ala Gln Arg

35 40 45

Val Val Arg Thr Met Val His Leu Val Leu Gln Pro Lys Arg Val Thr

50 55 60

Leu Val His Pro Pro Arg Gly Leu Glu Pro Val Cys Thr Pro Ile Ala

65 70 75 80

Arg Met Arg Pro Lys Ser His Gly Leu Arg Ser Ser Leu Pro Leu Ala

85 90 95

Met Ile Pro Gln Pro Ala Thr Arg Val Ser Arg Pro Gln Ala Leu Trp

100 105 110

Lys Arg Leu Tyr Val Ala Cys Thr

115 120

&lt;210&gt; 3676

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3676

Met Thr Lys Asp Pro Pro Arg Val Thr Gln Pro Gly Pro Leu Val Arg  
 1 5 10 15  
 Gly Pro Glu Cys Leu Gln Cys Pro Cys Ile Glu Ala Leu Asn Lys Ala  
 20 25 30  
 Arg Ser Arg Cys Arg Gly Pro Leu Trp Ile Pro Pro Glu His Leu Pro  
 35 40 45  
 Arg Ile Met Ala Pro Lys Thr Glu Gly Lys Glu Thr Ala Gln Phe Ala  
 50 55 60  
 Lys Arg Gln Asp Leu Ser Thr Arg Val Ala Leu Trp Arg Leu Arg Lys  
 65 70 75 80  
 Met Phe Ala Cys Gln Tyr Leu Leu Ser Phe Pro Pro Val Pro Thr Lys  
 85 90 95  
 Arg Gly His Lys Ser Ser Ala Trp His Trp Arg Val Ser Glu Gly Pro  
 100 105 110  
 Glu Ser Cys Val Ser His Gly Val Leu  
 115 120

&lt;210&gt; 3677

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3677

Met Arg Lys Pro Arg Pro Arg Lys Val Lys Tyr Leu Ala Gln Gly His  
 1 5 10 15  
 Thr Ala Ser Lys Glu Gly Ala Gly Leu Asp Ser Asn Ala Ser Leu Pro

20	25	30
Leu Cys Ser Val Cys Gly Gln Pro Ala Pro Phe His Ile Cys Cys Leu		
35	40	45
Pro Gly Phe Leu Pro Glu Ala Pro Ile Ala Leu Arg Gly Val Gln Ala		
50	55	60
Asp Pro Pro Val Leu Leu Leu Gly Pro Gly Glu Leu Glu Lys Pro Gly		
65	70	75
Gly Gln Val Trp Val Gly Ser Pro Leu Pro Ser Ser Arg Ala Cys Pro		
85	90	95
Pro Pro Ala Cys Ser Pro Leu Leu Asn Pro Met Pro Thr Phe Cys Lys		
100	105	110
Leu Trp Leu Arg Lys Ser Ser Ser Ala Trp Leu Cys Thr Glu Val Ser		
115	120	125
Ser Ala Trp Asn His Val Gln Met Arg Cys Ala Cys Ala His Val Glu		
130	135	140
Trp Cys Ser Lys Asn Leu Tyr Ser Ala Ser Trp Lys Arg Ser His Ser		
145	150	155
Arg Arg Pro Ala Gly Ala Ala Arg Ala Trp Glu Arg Arg Pro Gly Arg		
165	170	175
Gly Cys Thr Pro Gly Pro Gly Gly Gly Arg Gly Arg Ala Gly Ala Glu		
180	185	190
Pro Gly Gly Ser Arg Arg Ala Cys Arg His Thr Gly Pro Arg Gln Ala		
195	200	205
Pro Cys Gln Ala Pro Gly Pro Arg Leu Ala Ser Pro Pro Arg Arg Lys		
210	215	220
Gln Thr Gly Leu Trp Leu Pro Pro Ser Glu Pro Thr Pro Ser Leu Phe		
225	230	235
Ser Arg Pro Glu Leu Leu Ile Pro Ser Ile Ser Phe Arg Pro Leu Gly		
245	250	255

Thr Tyr Pro Arg Val Asp Ala Leu Ser His Ala Met Gly Ser Gly Met

260

265

270

Gly Trp Gly Val Leu Thr Leu Arg Ala Val Val Gly Leu Pro His Val

275

280

285

Arg Thr

290

<210> 3678

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3678

Met Val Gly Pro Ser His Leu Gly Asn Ser Ser Leu Met Gln Ser Val

1

5

10

15

Thr Gln Gln Trp Cys Leu Gly Ala Ser Ala Cys Ile Gly Ala Gly Leu

20

25

30

Val Pro Lys Pro Arg Pro Pro Pro Cys Gly Ser Thr Thr Gly Lys Gly

35

40

45

Asn Asn Gln Thr Ser Ser Ser Val Val Met Arg Ile Gln Glu Asp His

50

55

60

Val Asn Ile Gly Ile His Asn Gly Gln Thr Leu Trp Arg Met Pro Val

65

70

75

80

Ile Pro Ala Ile Trp Glu Ala Glu Val Gly Arg Trp Arg Glu Pro Gln

85

90

95

Asn Leu Lys Pro Ala Trp Ala Thr Trp Gln Asn Gln Ser Leu Leu Lys

100

105

110

Ile Gln Lys Ile Gly

115

&lt;210&gt; 3679

&lt;211&gt; 342

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3679

Met Leu Pro Leu Glu Pro Cys Arg Arg Pro Asn Phe Glu Leu Ile Pro

1 5 10 15

Leu Leu Asn Ser Val Asp Ser Asp Asn Cys Gly Ser Met Val Pro Ser

20 25 30

Phe Ala Asp Ile Leu Tyr Val Ala Asn Asp Glu Glu Ala Ser Tyr Leu

35 40 45

Arg Phe Arg Asn Ser Ile Trp Lys Asn Glu Glu Glu Lys Val Glu Ile

50 55 60

Phe His Pro Leu Arg Leu Val Arg Asp Pro Leu Ser Pro Ala Val Arg

65 70 75 80

Gln Lys Glu Thr Val Lys Asn Asp Leu Pro Val Asn Glu Ala Ala Ile

85 90 95

Arg Lys Ile Ala Ala Leu Glu Asn Glu Leu Thr Phe Leu Arg Ser Gln

100 105 110

Ile Ala Ala Ile Val Glu Met Gln Glu Leu Lys Asn Ser Thr Asn Ser

115 120 125

Ser Ser Phe Gly Leu Ser Asp Glu Arg Ile Ser Leu Gly Gln Leu Ser

130 135 140

Ser Ser Arg Ala Ala His Leu Ser Val Asp Pro Asp Gln Leu Pro Gly

145 150 155 160

Ser Val Leu Ser Pro Pro Pro Pro Pro Pro Leu Pro Pro Gln Phe Ser  
165 170 175  
Ser Leu Gln Pro Pro Cys Phe Pro Pro Val Gln Pro Gly Ser Asn Asn  
180 185 190  
Ile Cys Asp Ser Asp Asn Pro Ala Thr Glu Met Ser Lys Gln Asn Pro  
195 200 205  
Ala Ala Asn Lys Thr Asn Tyr Ser His His Ser Lys Ser Gln Arg Asn  
210 215 220  
Lys Asp Ile Pro Asn Met Leu Asp Val Leu Lys Asp Met Asn Lys Val  
225 230 235 240  
Lys Leu Arg Ala Ile Glu Arg Ser Pro Gly Gly Arg Pro Ile His Lys  
245 250 255  
Arg Lys Arg Gln Asn Ser His Trp Asp Pro Val Ser Leu Ile Ser His  
260 265 270  
Ala Leu Lys Gln Lys Phe Ala Phe Gln Glu Asp Asp Ser Phe Glu Lys  
275 280 285  
Glu Asn Arg Ser Trp Glu Ser Ser Pro Phe Ser Ser Pro Glu Thr Ser  
290 295 300  
Arg Phe Gly His His Ile Ser Gln Ser Glu Gly Gln Arg Thr Lys Glu  
305 310 315 320  
Glu Met Val Asn Thr Lys Ala Val Asp Gln Gly Ile Ser Asn Thr Ser  
325 330 335  
Leu Leu Asn Ser Arg Ile  
340

&lt;210&gt; 3680

&lt;211&gt; 247

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3680

Met Gly Gln Gly Leu Pro Asp Glu Glu Gln Glu Lys Leu Leu Arg Ile  
1 5 10 15  
Cys Ser Ile Tyr Thr Gln Ser Gly Glu Asn Ser Leu Val Gln Glu Gly  
20 25 30  
Ser Glu Ala Ser Pro Ile Gly Lys Ser Pro Tyr Thr Leu Asp Ser Leu  
35 40 45  
Tyr Trp Ser Val Lys Pro Ala Ser Ser Ser Phe Gly Ser Glu Ala Lys  
50 55 60  
Ala Gln Gln Gln Glu Glu Gln Gly Ser Val Asn Asp Val Lys Glu Glu  
65 70 75 80  
Glu Lys Glu Glu Lys Glu Val Leu Pro Asp Gln Val Glu Glu Glu Glu  
85 90 95  
Glu Asn Asp Asp Gln Glu Glu Glu Glu Glu Asp Glu Asp Asp Glu Asp  
100 105 110  
Asp Glu Glu Glu Asp Arg Met Glu Val Gly Pro Phe Ser Thr Gly Gln  
115 120 125  
Glu Ser Pro Thr Ala Glu Asn Ala Arg Leu Leu Ala Gln Lys Arg Gly  
130 135 140  
Ala Leu Gln Gly Ser Ala Trp Gln Val Ser Ser Glu Asp Val Arg Trp  
145 150 155 160  
Asp Thr Phe Pro Leu Gly Arg Met Pro Gly Gln Thr Glu Asp Pro Ala  
165 170 175  
Glu Leu Met Leu Glu Asn Tyr Asp Thr Met Tyr Leu Leu Asp Gln Pro  
180 185 190  
Val Leu Glu Gln Arg Leu Glu Pro Ser Thr Cys Lys Thr Asp Thr Leu  
195 200 205



Gly Leu Ser Cys Gly Val Gly Ser Gly Asn Cys Ser Asn Ser Ser Ser  
 210 215 220  
 Ser Asn Phe Glu Gly Leu Leu Trp Ser Gln Gly Gln Leu His Gly Leu  
 225 230 235 240  
 Lys Thr Gly Leu Gln Leu Phe  
 245

<210> 3681

<211> 413

<212> PRT

<213> Homo sapiens

<400> 3681

Met Gly Ser Ser Gln Ser Val Glu Ile Pro Gly Gly Gly Thr Glu Gly  
 1 5 10 15  
 Tyr His Val Leu Arg Val Gln Glu Asn Ser Pro Gly His Arg Ala Gly  
 20 25 30  
 Leu Glu Pro Phe Phe Asp Phe Ile Val Ser Ile Asn Gly Ser Arg Leu  
 35 40 45  
 Asn Lys Asp Asn Asp Thr Leu Lys Asp Leu Leu Lys Ala Asn Val Glu  
 50 55 60  
 Lys Pro Val Lys Met Leu Ile Tyr Ser Ser Lys Thr Leu Glu Leu Arg  
 65 70 75 80  
 Glu Thr Ser Val Thr Pro Ser Asn Leu Trp Gly Gly Gln Gly Leu Leu  
 85 90 95  
 Gly Val Ser Ile Arg Phe Cys Ser Phe Asp Gly Ala Asn Glu Asn Val  
 100 105 110  
 Trp His Val Leu Glu Val Glu Ser Asn Ser Pro Ala Ala Leu Ala Gly

115 120 125  
Leu Arg Pro His Ser Asp Tyr Ile Ile Gly Ala Asp Thr Val Met Asn  
130 135 140  
Glu Ser Glu Asp Leu Phe Ser Leu Ile Glu Thr His Glu Ala Lys Pro  
145 150 155 160  
Leu Lys Leu Tyr Val Tyr Asn Thr Asp Thr Asp Asn Cys Arg Glu Val  
165 170 175  
Ile Ile Thr Pro Asn Ser Ala Trp Gly Gly Glu Gly Ser Leu Gly Cys  
180 185 190  
Gly Ile Gly Tyr Gly Tyr Leu His Arg Ile Pro Thr Arg Pro Phe Glu  
195 200 205  
Glu Gly Lys Lys Ile Ser Leu Pro Gly Gln Met Ala Gly Thr Pro Ile  
210 215 220  
Thr Pro Leu Lys Asp Gly Phe Thr Glu Val Gln Leu Ser Ser Val Asn  
225 230 235 240  
Pro Pro Ser Leu Ser Pro Pro Gly Thr Thr Gly Ile Glu Gln Ser Leu  
245 250 255  
Thr Gly Leu Ser Ile Ser Ser Thr Pro Pro Ala Val Ser Ser Val Leu  
260 265 270  
Ser Thr Gly Val Pro Thr Val Pro Leu Leu Pro Pro Gln Val Asn Gln  
275 280 285  
Ser Leu Thr Ser Val Pro Pro Met Asn Pro Ala Thr Thr Leu Pro Gly  
290 295 300  
Leu Met Pro Leu Pro Ala Gly Leu Pro Asn Leu Pro Asn Leu Asn Leu  
305 310 315 320  
Asn Leu Pro Ala Pro His Ile Met Pro Gly Val Gly Leu Pro Glu Leu  
325 330 335  
Val Asn Pro Gly Leu Pro Pro Leu Pro Ser Met Pro Pro Arg Asn Leu  
340 345 350

Pro Gly Ile Ala Pro Leu Pro Leu Pro Ser Glu Phe Leu Pro Ser Phe  
                   355                                  360                                  365  
 Pro Leu Val Pro Glu Ser Ser Ser Ala Ala Ser Ser Gly Glu Leu Leu  
                   370                                  375                                  380  
 Ser Ser Leu Pro Pro Thr Ser Asn Ala Pro Ser Asp Pro Ala Thr Thr  
 385                                  390                                  395                                  400  
 Thr Ala Lys Ala Asp Ala Ala Ser Ser Ser Leu Trp Met  
                                   405                                  410

<210> 3682

<211> 425

<212> PRT

<213> Homo sapiens

<400> 3682

Met Arg Ser Leu Asp Phe Gly Met Arg Thr Gln Val Thr Arg Glu Ala  
           1                                  5                                  10                                  15  
 Ile Ser Arg Leu Cys Glu Ala Val Pro Gly Ala Asn Gly Ala Ile Lys  
                                   20                                  25                                  30  
 Lys Arg Lys Pro Pro Val Lys Phe Leu Ser Thr Val Leu Gly Lys Ser  
                   35                                  40                                  45  
 Asn Leu Gln Phe Ser Gly Met Asn Ile Lys Leu Thr Ile Ser Thr Cys  
           50                                  55                                  60  
 Ser Leu Thr Leu Met Asn Leu Asp Asn Gln Gln Ile Ile Ala Asn His  
           65                                  70                                  75                                  80  
 His Met Gln Ser Ile Ser Phe Ala Ser Gly Gly Asp Pro Asp Thr Thr  
                                   85                                  90                                  95  
 Asp Tyr Val Ala Tyr Val Ala Lys Asp Pro Val Asn Gln Arg Ala Cys

100	105	110	
His Ile Leu Glu Cys His Asn Gly Met Ala Gln Asp Val Ile Ser Thr			
115	120	125	
Ile Gly Gln Ala Phe Glu Leu Arg Phe Lys Gln Tyr Leu Lys Asn Pro			
130	135	140	
Ser Leu Asn Thr Ser Cys Glu Ser Glu Glu Val His Ile Asp Ser His			
145	150	155	160
Ala Glu Glu Arg Glu Asp His Glu Tyr Tyr Asn Glu Ile Pro Gly Lys			
165	170	175	
Gln Pro Pro Val Gly Gly Val Ser Asp Met Arg Ile Lys Val Gln Ala			
180	185	190	
Thr Glu Gln Met Ala Tyr Cys Pro Ile Gln Cys Glu Lys Leu Cys Tyr			
195	200	205	
Leu Pro Gly Asn Ser Lys Cys Ser Ser Val Tyr Glu Asn Cys Leu Glu			
210	215	220	
Gln Ser Arg Ala Ile Gly Asn Val His Pro Arg Gly Val Gln Ser Gln			
225	230	235	240
Arg Asp Thr Ser Leu Leu Lys His Thr Cys Arg Val Asp Leu Phe Asp			
245	250	255	
Asp Pro Cys Tyr Ile Asn Thr Gln Ala Leu Gln Ser Thr Pro Gly Ser			
260	265	270	
Ala Gly Asn Gln Arg Ser Ala Gln Pro Leu Gly Ser Pro Trp His Cys			
275	280	285	
Gly Lys Ala Pro Glu Thr Val Gln Pro Gly Ala Thr Ala Gln Pro Ala			
290	295	300	
Ser Ser His Ser Leu Pro His Ile Lys Gln Gln Leu Trp Ser Glu Glu			
305	310	315	320
Cys Tyr His Gly Lys Leu Ser Arg Lys Ala Ala Glu Ser Leu Leu Val			
325	330	335	

Lys Asp Gly Asp Phe Leu Val Arg Glu Ser Ala Thr Ser Pro Gly Gln

340

345

350

Tyr Val Leu Ser Gly Leu Gln Gly Gly Gln Ala Lys His Leu Leu Leu

355

360

365

Val Asp Pro Glu Gly Lys Val Arg Thr Lys Asp His Val Phe Asp Asn

370

375

380

Val Gly His Leu Ile Arg Tyr His Met Asp Asn Ser Leu Pro Ile Ile

385

390

395

400

Ser Ser Gly Ser Glu Val Ser Leu Lys Gln Pro Val Arg Lys Asp Asn

405

410

415

Asn Pro Ala Leu Leu His Ser Asn Lys

420

425

<210> 3683

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3683

Met Asp Gly Leu Lys Val Gly His Asp Pro Ala Lys Glu Phe Thr Asn

1

5

10

15

His Trp Trp Asn Glu Leu Phe Asn Lys Thr Ala Ala Asn Leu Val Val

20

25

30

Glu Thr Gly Gln Asp Gly Val Gln Ile Arg Ser Leu Ser Lys Glu Thr

35

40

45

Thr Arg Tyr Asn His Pro Lys Pro Asn Leu Leu Tyr Gln Lys Phe Val

50

55

60

Lys Val Leu Glu Ala Val Gly Asn Arg Val His Pro Phe Ser Leu Pro

65                      70                      75                      80  
Trp Phe Pro Trp Gly Leu Asn Ser Cys Leu Val Cys Leu Ile Asn Ser  
                         85                      90                      95  
Gln Asn Phe Pro Asn Ile Val Gly Ser Cys Asp Gln Pro Cys Cys Cys  
                         100                      105                      110  
Leu Leu Arg Leu Pro Arg Pro Ser Ala Gly Ile Glu Ile Phe Arg Phe  
                         115                      120                      125  
Arg Gly Ser Cys His Leu Leu Arg Glu Gln Gln  
                         130                      135

&lt;210&gt; 3684

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3684

Met Ala Lys Arg Leu Gln Ala Glu Leu Ser Cys Pro Val Cys Leu Asp  
1                      5                      10                      15  
Phe Phe Ser Cys Ser Ile Ser Leu Ser Cys Thr His Val Phe Cys Phe  
                         20                      25                      30  
Asp Cys Ile Gln Arg Tyr Ile Leu Glu Asn His Asp Phe Arg Ala Met  
                         35                      40                      45  
Cys Pro Leu Cys Arg Asp Val Val Lys Val Pro Ala Leu Glu Glu Trp  
                         50                      55                      60  
Gln Val Ser Val Leu Thr Leu Met Thr Lys Gln His Asn Ser Arg Leu  
65                      70                      75                      80  
Glu Gln Ser Leu His Val Arg Glu Glu Leu Arg His Phe Arg Glu Asp  
                         85                      90                      95

Val Thr Leu Asp Ala Ala Thr Ala Ser Ser Leu Leu Val Phe Ser Asn  
100 105 110  
Asp Leu Arg Ser Ala Gln Cys Lys Lys Ile His His Asp Leu Thr Lys  
115 120 125  
Asp Pro Arg Leu Ala Cys Val Leu Gly Thr Pro Cys Phe Ser Ser Gly  
130 135 140  
Gln His Tyr Trp Glu Val Glu Val Gly Glu Val Lys Ser Trp Ser Leu  
145 150 155 160  
Gly Val Cys Lys Glu Pro Ala Asp Arg Lys Ser Asn Asp Leu Phe Pro  
165 170 175  
Gly His Gly Phe Trp Ile Ser Met Lys Ala Gly Ala Ile His Ala Asn  
180 185 190  
Thr His Leu Glu Arg Ile Pro Ala Ser Pro Arg Leu Arg Arg Val Gly  
195 200 205  
Ile Phe Leu Asp Ala Asp Leu Glu Glu Ile Gln Phe Phe Asp Val Asp  
210 215 220  
Asn Asn Val Leu Ile Tyr Thr His Asp Gly Phe Phe Ser Leu Glu Leu  
225 230 235 240  
Leu Cys Pro Phe Phe Cys Leu Glu Leu Leu Gly Glu Gly Glu Ser Gly  
245 250 255  
Asn Val Leu Thr Ile Cys Pro  
260

&lt;210&gt; 3685

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3685

Met Asp Trp Gly Gly Gly Ser Thr Leu Thr Pro Ala Gly Ala Ser Ala

1 5 10 15

Gln Glu Pro Arg Leu Ala Gln Pro Ser Leu Gly Arg Pro Ile Pro Arg

20 25 30

Val Pro His Pro Val Ser Val Ser Thr Asp Gln Gly Leu Pro Asp Thr

35 40 45

Cys Ser Gly Val Ala Met Gly Thr Ser Gly Arg Val Ser Val Ala His

50 55 60

Thr Ala Val Cys Arg His Thr Glu Gly Met His Ala Cys Val Cys Ala

65 70 75 80

His Leu His Val Phe Thr Arg Thr Gly His Arg Arg Arg Cys Ser His

85 90 95

Ser Gly Val His Arg Pro Leu Cys Arg Cys Ala His Thr Gln Gln Gly

100 105 110

Tyr Val His Arg Arg Val Cys Val Leu Ala Pro Gly Gly Gly Ser Arg

115 120 125

Pro Thr Pro His Ile Val Tyr Ser Val Pro Ala Ala Arg Thr Cys Leu

130 135 140

Gly Ala Pro Gly Ser Leu Ser Pro Cys His Leu Cys Val His Ile Cys

145 150 155 160

Ala His Thr Tyr Ser Gly Thr Pro Val Cys Val His Gly Cys Pro Gly

165 170 175

Thr Leu Gly Ser Pro Ser Pro Arg Leu Pro Arg Leu Leu Glu Ser Gly

180 185 190

Thr Phe



&lt;210&gt; 3686

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3686

Met Arg Ser Phe Leu Leu Val Trp Lys Leu Phe Arg Arg Lys Asp Met

1 5 10 15

Lys His Gln Arg Lys Thr Ala Thr Glu Phe Lys Thr Thr Glu Glu Gly

20 25 30

Glu Thr Arg Gln Asp Gly Lys Asp Gly Ser Leu Thr Tyr Arg Ala Asp

35 40 45

Thr Cys Ser Pro Cys Pro Glu Ala Gly Gly Pro Pro Ser Ser Ser Ile

50 55 60

Ala Ser Gly Ser Ser Ile Ser Val Gly Asn Ser Pro Ser His Ser His

65 70 75 80

Ser His Thr Ser Arg Arg Cys Gly Gly Ser Ser Arg Ser Arg Glu Cys

85 90 95

Cys Ser Ser Leu His Ser Ser Arg Gly Ser Arg Gly Ser Ser Trp Ser

100 105 110

Ser Ser Pro Pro Gly Ser Thr Cys Arg Trp Cys Ser Cys His Ser His

115 120 125

His His Ser His His Arg Ser His His Arg Ser His His Cys Ser His

130 135 140

His His Ser His His His Ser Gly His His Ser His His Asn Phe His

145 150 155 160

Asn His Ser Asn Pro Trp Cys Gln

165

&lt;210&gt; 3687

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3687

Met Leu Val Met Glu Asp Gln His Asn Ser Glu Ile Glu Ser Leu Gln

1 5 10 15

Lys Ala Leu Gly Val Ala Arg Glu Asp Asn Arg Lys Leu Ala Met Ser

20 25 30

Leu Glu Gln Ala Leu Gln Thr Asn Asn His Leu Gln Thr Lys Leu Asp

35 40 45

His Ile Gln Glu Gln Leu Glu Ser Lys Glu Leu Glu Arg Gln Asn Leu

50 55 60

Glu Thr Phe Lys Asp Arg Met Thr Glu Glu Ser Lys Val Glu Ala Glu

65 70 75 80

Leu His Ala Glu Arg Ile Glu Ala Leu Arg Lys Gln Phe Gln Thr Glu

85 90 95

Arg Glu Thr Thr Lys Lys Val Ala Gln Arg Glu Val Ala Glu Leu Lys

100 105 110

Lys Ala Leu Asp Glu Ala Asn Phe Arg Ser Val Glu Val Ser Arg Thr

115 120 125

Asn Arg Glu Leu Arg Gln Lys Leu Ala Glu Leu Glu Lys Ile Leu Glu

130 135 140

Ser Asn Lys Glu Lys Ile Lys Asn Gln Lys Thr Gln Ile Lys Leu His

145 150 155 160

Leu Ser Ala Lys Ala Asn Asn Ala Gln Asn Ile Glu Arg Met Lys Val

165 170 175

Val Trp Glu Thr Ser Ser His Phe Leu Asp Thr Leu  
 180 185

<210> 3688

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3688

Met Thr Cys Trp Glu Gly Asn Cys His Val Cys Ser Ser Pro Gly Gly  
 1 5 10 15  
 Ser Asp Val Phe Leu Ile Ile Leu Gln Val Pro Lys Ala His Pro Cys  
 20 25 30  
 Leu Trp Gly His Ile Thr Ser His Val Thr Leu Cys Ser Phe Gly Thr  
 35 40 45  
 Met Ser Leu Trp Thr Val Trp Leu Ile Val Val Val Gln Gly Gln Val  
 50 55 60  
 Met Cys His Pro Ser Leu Lys Cys Leu His Pro Val Asn Cys Leu Ala  
 65 70 75 80  
 Tyr Phe Pro Leu Thr Pro Gly Ser Gly Pro Ser Ser Leu Leu Ser Pro  
 85 90 95  
 Tyr Leu Ser Pro His Ile Gln Ser Pro Pro Lys Ile Leu Pro Val Leu  
 100 105 110  
 Leu Leu Cys Pro Phe Glu Arg Ala Gln Ser Phe Ile Leu  
 115 120 125

<210> 3689

&lt;211&gt; 343

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3689

Met His His Thr Arg Glu Ser Lys Asp Gly Glu Pro Ser Pro Arg Ser

1 5 10 15

Ala Ala His Thr Met Pro Arg Arg Lys Lys Gly Tyr Cys Glu Cys Cys

20 25 30

Gln Glu Ala Phe Glu Glu Leu His Val His Leu Gln Ser Ala Gln His

35 40 45

Arg Ser Phe Ala Leu Glu Ala His Leu Tyr Ala Glu Val Asp Arg Ile

50 55 60

Ile Ala Gln Leu Ser His Ser Phe Ala Asp Ile Pro Phe Gln Ala Gly

65 70 75 80

Leu Pro Arg Trp Ser Gly Ser Pro Ala Ser Asp Cys Asp Pro Leu Cys

85 90 95

Pro Glu Thr Leu His Pro His Gln Pro Ser His Pro Arg Ala Ala Ser

100 105 110

Pro Arg Ile Arg Lys Glu Asp Ser Cys Gln Ala Ser Val Thr Gln Gly

115 120 125

Arg Ala Ala Gly Gln Gln Arg Trp Thr Glu Ser Leu Asp Gly Val Met

130 135 140

Gly Pro Pro Ala Ser His Thr Cys Val Ser Ala Thr Thr Leu Leu Pro

145 150 155 160

Ala Leu Pro Lys Gly Ser Arg Glu Gln Gly Cys Leu Cys Pro Cys Pro

165 170 175

Ala Ser Phe Thr Gln Ser His Leu Val Thr Ser Leu Ala Leu Leu Pro

180 185 190

Gly Glu Trp Ser Pro Ala Glu Asp Met Pro Leu His Pro Ser Gln Glu  
195 200 205  
Asn Ser Phe Ala Pro Ala Asp Ile Pro Val Lys Gly Pro Leu Leu Phe  
210 215 220  
Pro Glu Ala Arg Pro Trp Leu Met Ser Ala Arg Cys Trp Val Arg Pro  
225 230 235 240  
Phe Pro Phe Val Thr Trp Gly Cys Leu Ile Pro His Asp Thr Thr Pro  
245 250 255  
Leu His Glu Glu Val Ser Pro Cys Pro Cys Leu Arg Leu Gly Tyr Leu  
260 265 270  
Tyr Leu Leu Leu Thr Gln Ser Leu Trp Cys Arg Val Arg Val Pro Ser  
275 280 285  
Leu Ser Thr Ala Gly Pro Ile Pro Arg Thr Ser His Pro Cys Thr Leu  
290 295 300  
Ala Phe Pro Ser Tyr Leu Asn Asp His Asp Leu Gly His Leu Cys Gln  
305 310 315 320  
Ala Lys Pro Gln Gly Trp Asn Thr Pro Gln Pro Phe Leu His Cys Gly  
325 330 335  
Phe Leu Ala Val Asp Ser Gly  
340

&lt;210&gt; 3690

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3690

Met Cys Arg Gly Gly Arg Met Phe Ala Pro Thr Lys Thr Trp Arg Arg

1	5	10	15
Trp His Arg Arg Val Asn Thr Thr Gln Lys Arg Tyr Ala Ile Cys Ser			
20	25	30	
Ala Leu Ala Ala Ser Ala Leu Pro Ala Leu Val Met Ser Lys Gly His			
35	40	45	
Arg Ile Glu Glu Val Pro Glu Leu Pro Leu Val Val Glu Asp Lys Val			
50	55	60	
Glu Gly Tyr Lys Lys Thr Lys Glu Ala Val Leu Leu Leu Lys Lys Leu			
65	70	75	80
Lys Ala Trp Asn Asp Ile Lys Lys Val Tyr Ala Ser Gln Arg Met Arg			
85	90	95	
Ala Gly Lys Gly Lys Met Arg Asn Arg Arg Arg Ile Gln Arg Arg Gly			
100	105	110	
Pro Cys Ile Ile Tyr Asn Glu Asp Asn Gly Ile Ile Lys Ala Phe Arg			
115	120	125	
Asn Ile Pro Gly Ile Thr Leu Leu Asn Val Ser Lys Leu Asn Ile Leu			
130	135	140	
Lys Leu Ala Pro Gly Gly His Val Gly Arg Phe Cys Ile Trp Thr Glu			
145	150	155	160
Ser Ala Phe Arg Lys Leu Asp Glu Leu Tyr Gly Thr Trp Arg Lys Ala			
165	170	175	
Ala Ser Leu Lys Ser Asn Tyr Asn Leu Pro Met His Lys Met Ile Asn			
180	185	190	
Thr Asp Leu Ser Arg Ile Leu Lys Ser Pro Glu Ile Gln Arg Ala Leu			
195	200	205	
Arg Ala Pro Arg Lys Lys Ile His Arg Arg Val Leu Lys Lys Asn Pro			
210	215	220	
Leu Lys Asn Leu Arg Ile Met Leu Lys Leu Asn Pro Tyr Ala Lys Thr			
225	230	235	240

<210> 3691

&lt;212&gt; PRT

<400> 3691

出証特 2 0 0 4 - 3 0 5 9 6 6 0

65                      70                      75                      80  
Gly Ser Asp Asp Leu Lys Glu Pro Gly Pro Trp Gly Lys Ala Cys Ser  
                         85                      90                      95  
Leu Pro Met Trp Ser Thr Gly Pro Glu Ala Arg Asp Gly Asp Ser Ser  
                         100                      105                      110  
Val Ser Ser Gly Arg Leu Ser Cys Ser Ser Gly Gly His Asp Val Cys  
                         115                      120                      125  
Val Ser Trp Lys Glu Arg Pro Pro Gln Val Leu Gly Pro Gln Gln Arg  
                         130                      135                      140  
Pro Arg Lys Ser Asp Ala Arg Leu Glu Gln Leu Arg Asp Lys Ile Arg  
145                      150                      155                      160  
Ala Gln Ala Trp Gln Gln Gly Ser Cys Ala Ser Leu Gly Thr Ser Ala  
                         165                      170                      175  
Pro Ser Ser Ala Ser Arg Leu His Lys Ala Ser Met Leu Thr Leu Arg  
                         180                      185                      190  
Arg Lys Gly Gln Glu Ala Lys Asn Pro Pro Pro Ala Pro Glu Cys Ser  
                         195                      200                      205  
Gly Phe Ser Ile Leu Ser Ala Ala Glu Arg Arg Val Glu Ala Lys Ala  
                         210                      215                      220  
Ser His Gly Gln Gly Arg Glu Leu Ser Arg Val Ser Gln His Gln Val  
225                      230                      235                      240  
Pro Val Leu Arg Glu Lys Pro Lys Arg Val Lys Ser Ser Ser Cys Lys  
                         245                      250                      255  
Arg Glu Lys Thr Pro Lys Leu Pro Ser Pro Arg Arg Ala Ala Lys Asp  
                         260                      265                      270  
Lys His Lys Asp Glu Gly Trp Gln Ser Cys Ser His Phe Val Asp Glu  
                         275                      280                      285  
Ala Thr Glu Val His Arg Val Ser Thr Ala Cys Pro Gly Leu His Arg  
                         290                      295                      300



Gly Arg Ala Ser His Pro Ser Ser Pro Arg Pro Val Leu Leu Thr Trp  
 305                      310                      315                      320  
 Lys Pro Ser Arg Val His Leu Gly Pro Arg Leu Gly Ser Leu Ser Arg  
                          325                      330                      335  
 Pro Pro Ser Arg Arg Gly Phe Trp Gly His Arg Thr Thr Ala Phe Trp  
                          340                      345                      350  
 Arg His Gln Gln Glu Pro Pro Gly Gly Val Asn Ala  
                          355                      360

<210> 3692

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3692

Met Trp Lys Gly Phe Ile Leu Thr Val Val Glu Leu Arg Val Pro Thr  
 1                      5                      10                      15  
 Asp Leu Thr Leu Leu Pro Gly His Leu Tyr Met Met Ser Glu Val Leu  
                          20                      25                      30  
 Ala Lys Glu Glu Ala Arg Arg Ala Leu Glu Thr Pro Ser Cys Phe Leu  
                          35                      40                      45  
 Lys Val Ser Arg Leu Glu Ala Gln Leu Leu Leu Glu Arg Tyr Pro Glu  
                          50                      55                      60  
 Cys Gly Asn Leu Leu Leu Arg Pro Ser Gly Asp Gly Ala Asp Gly Val  
 65                      70                      75                      80  
 Ser Val Thr Thr Arg Gln Met His Asn Gly Thr His Val Val Arg His  
                          85                      90                      95  
 Tyr Lys Val Lys Arg Glu Gly Pro Lys Tyr Val Ile Asp Val Glu Gln

100 105 110  
Pro Phe Ser Cys Thr Ser Leu Asp Ala Val Val Asn Tyr Phe Val Ser  
115 120 125  
His Thr Lys Lys Ala Leu Val Pro Phe Leu Leu Asp Glu Asp Tyr Glu  
130 135 140  
Lys Val Leu Gly Tyr Val Glu Ala Asp Lys Glu Asn Gly Glu Asn Val  
145 150 155 160  
Trp Val Ala Pro Ser Ala Pro Gly Pro Gly Pro Ala Pro Cys Thr Gly  
165 170 175  
Gly Pro Lys Pro Leu Ser Pro Ala Ser Ser Gln Asp Lys Leu Pro Pro  
180 185 190  
Leu Pro Pro Leu Pro Asn Gln Glu Glu Asn Tyr Val Thr Pro Ile Gly  
195 200 205  
Asp Gly Pro Ala Val Asp Tyr Glu Asn Gln Asp Val Ala Ser Ser Ser  
210 215 220  
Trp Pro Val Ile Leu Lys Pro Lys Lys Leu Pro Lys Pro Pro Ala Lys  
225 230 235 240  
Leu Pro Lys Pro Pro Val Gly Pro Lys Pro Glu Lys Gly Phe His His  
245 250 255  
Val Ala Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro Thr  
260 265 270  
Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His His Thr Trp  
275 280 285  
Pro His Leu Ser Ser Leu Pro Glu Pro Lys Val Phe Asn Gly Gly Leu  
290 295 300  
Gly Arg Lys Leu Pro Val Ser Ser Ala Gln Pro Leu Phe Pro Thr Ala  
305 310 315 320  
Gly Leu Ala Asp Met Thr Ala Glu Leu Gln Lys Lys Leu Glu Lys Arg  
325 330 335

Arg Ala Leu Glu His

340

&lt;210&gt; 3693

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3693

Met Trp Leu Val Glu Cys Thr Gly Arg Asp Leu Thr Gly Leu Ser Cys

1 5 10 15

Leu Leu Gly Met Asp Arg Gln Pro Arg Arg Arg Gln His Val Ala Gly

20 25 30

Cys Arg Asp Val Pro Pro Pro Leu Pro Gln Gly Ser Trp Gly Gln Thr

35 40 45

Ser Pro Arg His Ser Ile Leu Cys Ser Lys Ser Gly Cys Asp Leu Leu

50 55 60

Gly Gly Gly Glu Tyr Asn Gly Glu Thr Ser Gly Glu Glu Phe Leu Ala

65 70 75 80

Pro Ala Trp Thr Cys Arg Ala Gln Gln Ala Ala Thr Trp Leu Ser Val

85 90 95

Gln Gln Thr Ser His Lys Ala Leu Gly Pro Ala Gly Gly Ala Ala Met

100 105 110

Ser Ser Lys Leu Ser Pro Glu Glu Gln Phe Leu Ser Arg Ile His Phe

115 120 125

Leu Arg Thr Phe Met Cys Ser Val Ala Gly Ala Glu Leu Pro Gly Ile

130 135 140

Pro Gln Ala Thr Glu Asn Gly Glu Gly Cys Arg Pro Ala Arg Asp Pro

145                      150                      155                      160  
 Ala Ser Ser Pro Ser Ser Leu Ser Met Ala Ser Val Cys Thr Gln Cys  
                          165                      170                      175  
 Ser Ser Ala Gln Leu Val Ser Ala Leu Ser  
                          180                      185

<210> 3694

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3694

Met Lys Thr His Ser Leu Thr Ile Thr Arg Thr Ala Ser Arg Gly Gly  
     1                      5                      10                      15  
 Ala Asn Pro Phe Val Arg Ser Cys Pro His Asp Pro Ile Thr Ser His  
                          20                      25                      30  
 His Ala Leu Pro Pro Thr Leu Gly Ile Ile Ile Glu His Glu Met Trp  
                          35                      40                      45  
 Met Gly Thr Gln Ile Gln Thr Ile Ser Lys Cys Val Val Phe Phe Phe  
     50                      55                      60  
 Leu Gly Leu Phe Ala Phe Leu Asp Arg Val Val Ser Phe Cys Phe Phe  
     65                      70                      75                      80  
 Arg Leu Glu Cys Ile Gly Ala Ile Val Ala Gln Leu Gln Pro Pro Thr  
                          85                      90                      95  
 Pro Gly Leu Lys Gln Ser Ser Gly Leu Arg Leu Tyr Phe Leu Cys Asp  
                          100                      105                      110  
 Trp Gln Asp Met Tyr Leu  
                          115

&lt;210&gt; 3695

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3695

Met Ala Val Gly Ile Leu Thr Gln Thr Val Gly Pro Trp Pro Arg Leu

1 5 10 15

Val Ala Tyr Leu Ser Lys Gln Leu Asp Gly Val Phe Lys Asp Trp Pro

20 25 30

Pro Cys Leu Arg Ala Leu Ala Ala Thr Ala Leu Leu Ala Gln Glu Val

35 40 45

Asp Lys Leu Thr Leu Gly Gln Asn Leu Asn Ile Lys Ala Ser His Ala

50 55 60

Val Val Thr Leu Met Asn Thr Lys Gly His His Trp Leu Met Asn Ala

65 70 75 80

Arg Leu Thr Arg Tyr Gln Asn Leu Leu Cys Glu Lys Pro Cys Ile Thr

85 90 95

Ile Glu Val Cys Asn Thr Leu Asn Pro Ala Thr Leu Leu Pro Val Pro

100 105 110

Glu Ser Pro Val Glu Gln Asn Cys Val Glu Val Leu Asp Thr Val Tyr

115 120 125

Ser Ser Arg Leu Asp Leu Gln Asp His Thr Trp Ala Ser Val Asp Trp

130 135 140

Glu Leu Tyr Val Asp Arg Ser Ser Phe Val Asn Pro Gln Gly Glu Arg

145 150 155 160

Cys Ala

&lt;210&gt; 3696

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3696

Met Gln Gln Asp Pro Glu Leu Pro Ser Val Thr Arg Phe Cys Leu Pro

1 5 10 15

Leu Cys Ala Arg Cys Tyr Val Gln Pro Gln Trp Val Phe Asp Ser Val

20 25 30

Asn Ala Arg Leu Leu Leu Pro Val Ala Glu Tyr Phe Ser Gly Val Gln

35 40 45

Leu Pro Pro His Leu Ser Pro Phe Val Thr Glu Lys Glu Gly Asp Tyr

50 55 60

Val Pro Pro Glu Lys Leu Lys Leu Leu Ala Leu Gln Arg Gly Glu Asp

65 70 75 80

Pro Gly Glu Arg Asp Gly Thr Gly Leu Ala Leu Thr Pro Gly Pro Thr

85 90 95

Leu Ala Val Ser Leu Ser Cys Gln Gly Gly Lys Leu Gln Gly Thr Gly

100 105 110

Ser Arg Ser Arg Lys Pro Phe Glu Val Thr Cys Arg Ile Arg Leu Arg

115 120 125

Arg Arg Asp Ile Tyr Leu Leu Gly Ser Gly Val Ile

130 135 140

&lt;210&gt; 3697

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3697

Met His Ser Arg His Leu Lys Ile Leu Ser His His Cys Cys Pro Val

1 5 10 15

Thr Thr Leu His Val Asn Ala Ser Leu Ser Leu Glu Leu Ser Leu Ser

20 25 30

Tyr Ser Gln Leu Pro Pro Pro Asn Thr Phe Arg Ala Gln Val Phe Ser

35 40 45

Val Thr Leu Ala Ser Leu Pro Cys Leu Leu Leu Leu Cys Lys Ser Asn

50 55 60

Ser Pro Leu Cys Pro Val Leu Phe Ser Ser Leu Leu His Ser Ile Pro

65 70 75 80

Arg Leu Pro Gln Asp Arg Val Ala Ser Ala Leu Asn Glu Phe Phe Ser

85 90 95

Pro Gly Leu Gln Gly Pro Gln Arg Ser Ser Ser Tyr Tyr Phe Met Asp

100 105 110

Cys Met Asn Ser Thr His Leu Val Thr Ser Trp Gln Val Val Trp Arg

115 120 125

&lt;210&gt; 3698

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3698

Met	Gly	Asn	Val	Met	Glu	Gly	Lys	Ser	Val	Glu	Glu	Leu	Ser	Ser	Thr
1				5					10					15	
Glu	Cys	His	Gln	Trp	Tyr	Lys	Lys	Phe	Met	Thr	Glu	Cys	Pro	Ser	Gly
			20					25					30		
Gln	Leu	Thr	Leu	Tyr	Glu	Phe	Arg	Gln	Phe	Phe	Gly	Leu	Lys	Asn	Leu
			35					40					45		
Ser	Pro	Ser	Ala	Ser	Gln	Tyr	Val	Glu	Gln	Met	Phe	Glu	Thr	Phe	Asp
	50					55					60				
Phe	Asn	Lys	Asp	Gly	Tyr	Ile	Asp	Phe	Met	Glu	Tyr	Val	Ala	Ala	Leu
65						70					75				80
Ser	Leu	Val	Leu	Lys	Gly	Lys	Val	Glu	Gln	Lys	Leu	Arg	Trp	Tyr	Phe
						85					90				95
Lys	Leu	Tyr	Asp	Val	Asp	Gly	Asn	Gly	Cys	Ile	Asp	Arg	Asp	Glu	Leu
				100				105						110	
Leu	Thr	Ile	Ile	Gln	Ala	Ile	Arg	Ala	Ile	Asn	Pro	Cys	Ser	Asp	Thr
				115				120						125	
Thr	Met	Thr	Ala	Glu	Glu	Phe	Thr	Asp	Thr	Val	Phe	Ser	Lys	Ile	Asp
			130					135					140		
Val	Asn	Gly	Asp	Gly	Glu	Leu	Ser	Leu	Glu	Glu	Phe	Ile	Glu	Gly	Val
145						150					155				160
Gln	Lys	Asp	Gln	Met	Leu	Leu	Asp	Thr	Leu	Thr	Arg	Ser	Leu	Asp	Leu
						165					170				175
Thr	Arg	Ile	Val	Arg	Arg	Leu	Gln	Asn	Gly	Glu	Gln	Asp	Glu	Glu	Gly
				180							185				190
Ala	Asp	Glu	Ala	Ala	Glu	Ala	Ala	Gly							
						195									200



&lt;210&gt; 3699

&lt;211&gt; 1394

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3699

Met Ala Ala Leu Leu Arg Ser Ala Arg Trp Leu Leu Arg Ala Gly Ala

1 5 10 15

Ala Pro Arg Leu Pro Leu Ser Leu Arg Leu Leu Pro Gly Gly Pro Gly

20 25 30

Arg Leu His Ala Ala Ser Tyr Leu Pro Ala Ala Arg Ala Gly Pro Val

35 40 45

Ala Gly Gly Leu Leu Ser Pro Ala Arg Leu Tyr Ala Ile Ala Ala Lys

50 55 60

Glu Lys Asp Ile Gln Glu Glu Ser Thr Phe Ser Ser Arg Lys Ile Ser

65 70 75 80

Asn Gln Phe Asp Trp Ala Leu Met Arg Leu Asp Leu Ser Val Arg Arg

85 90 95

Thr Gly Arg Ile Pro Lys Lys Leu Leu Gln Lys Val Phe Asn Asp Thr

100 105 110

Cys Arg Ser Gly Gly Leu Gly Gly Ser His Ala Leu Leu Leu Leu Arg

115 120 125

Ser Cys Gly Ser Leu Leu Pro Glu Leu Lys Leu Glu Glu Arg Thr Glu

130 135 140

Phe Ala His Arg Ile Trp Asp Thr Leu Gln Lys Leu Gly Ala Val Tyr

145 150 155 160

Asp Val Ser His Tyr Asn Ala Leu Leu Lys Val Tyr Leu Gln Asn Glu

165 170 175

Tyr Lys Phe Ser Pro Thr Asp Phe Leu Ala Lys Met Glu Glu Ala Asn

180	185	190
Ile Gln Pro Asn Arg Val Thr Tyr Gln Arg Leu Ile Ala Ser Tyr Cys		
195	200	205
Asn Val Gly Asp Ile Glu Gly Ala Ser Lys Ile Leu Gly Phe Met Lys		
210	215	220
Thr Lys Asp Leu Pro Val Thr Glu Ala Val Phe Ser Ala Leu Val Thr		
225	230	235
Gly His Ala Arg Ala Gly Asp Met Glu Asn Ala Glu Asn Ile Leu Thr		
245	250	255
Val Met Arg Asp Ala Gly Ile Glu Pro Gly Pro Asp Thr Tyr Leu Ala		
260	265	270
Leu Leu Asn Ala Tyr Ala Glu Lys Gly Asp Ile Asp His Val Lys Gln		
275	280	285
Thr Leu Glu Lys Val Glu Lys Ser Glu Leu His Leu Met Asp Arg Asp		
290	295	300
Leu Leu Gln Ile Ile Phe Ser Phe Ser Lys Ala Gly Tyr Pro Gln Tyr		
305	310	315
Val Ser Glu Ile Leu Glu Lys Val Thr Cys Glu Arg Arg Tyr Ile Pro		
325	330	335
Asp Ala Met Asn Leu Ile Leu Leu Leu Val Thr Glu Lys Leu Glu Asp		
340	345	350
Val Ala Leu Gln Ile Leu Leu Ala Cys Pro Val Ser Lys Glu Asp Gly		
355	360	365
Pro Ser Val Phe Gly Ser Phe Phe Leu Gln His Cys Val Thr Met Asn		
370	375	380
Thr Pro Val Glu Lys Leu Thr Asp Tyr Cys Lys Lys Leu Lys Glu Val		
385	390	395
Gln Met His Ser Phe Pro Leu Gln Phe Thr Leu His Cys Ala Leu Leu		
405	410	415

Ala Asn Lys Thr Asp Leu Ala Lys Ala Leu Met Lys Ala Val Lys Glu  
420 425 430  
Glu Gly Phe Pro Ile Arg Pro His Tyr Phe Trp Pro Leu Leu Val Gly  
435 440 445  
Arg Arg Lys Glu Lys Asn Val Gln Gly Ile Ile Glu Ile Leu Lys Gly  
450 455 460  
Met Gln Glu Leu Gly Val His Pro Asp Gln Glu Thr Tyr Thr Asp Tyr  
465 470 475 480  
Val Ile Pro Cys Phe Asp Ser Val Asn Ser Ala Arg Ala Ile Leu Gln  
485 490 495  
Glu Asn Gly Cys Leu Ser Asp Ser Asp Met Phe Ser Gln Ala Gly Leu  
500 505 510  
Arg Ser Glu Ala Ala Asn Gly Asn Leu Asp Phe Val Leu Ser Phe Leu  
515 520 525  
Lys Ser Asn Thr Leu Pro Ile Ser Leu Gln Ser Ile Arg Ser Ser Leu  
530 535 540  
Leu Leu Gly Phe Arg Arg Ser Met Asn Ile Asn Leu Trp Ser Glu Ile  
545 550 555 560  
Thr Glu Leu Leu Tyr Lys Asp Gly Arg Tyr Cys Gln Glu Pro Arg Gly  
565 570 575  
Pro Thr Glu Ala Val Gly Tyr Phe Leu Tyr Asn Leu Ile Asp Ser Met  
580 585 590  
Ser Asp Ser Glu Val Gln Ala Lys Glu Glu His Leu Arg Gln Tyr Phe  
595 600 605  
His Gln Leu Glu Lys Met Asn Val Lys Ile Pro Glu Asn Ile Tyr Arg  
610 615 620  
Gly Ile Arg Asn Leu Leu Glu Ser Tyr His Val Pro Glu Leu Ile Lys  
625 630 635 640  
Asp Ala His Leu Leu Val Glu Ser Lys Asn Leu Asp Phe Gln Lys Thr

645	650	655
Val Gln Leu Thr Ser Ser Glu Leu Glu Ser Thr Leu Glu Thr Leu Lys		
660	665	670
Ala Glu Asn Arg Pro Ile Arg Asp Val Leu Lys Gln Leu Ile Leu Val		
675	680	685
Leu Cys Ser Glu Glu Asn Met Gln Lys Ala Leu Glu Leu Arg Ala Lys		
690	695	700
Tyr Glu Ser Asp Met Val Thr Gly Gly Tyr Ala Ala Leu Ile Asn Leu		
705	710	715
Cys Cys Arg His Asp Lys Val Glu Asp Ala Leu Asn Leu Lys Glu Glu		
725	730	735
Phe Asp Arg Leu Asp Ser Ser Ala Val Leu Asp Thr Gly Lys Tyr Val		
740	745	750
Gly Leu Val Arg Val Leu Ala Lys His Gly Lys Leu Gln Asp Ala Ile		
755	760	765
Asn Ile Leu Lys Glu Met Lys Glu Lys Asp Val Leu Ile Lys Asp Thr		
770	775	780
Thr Ala Leu Ser Phe Phe His Met Leu Asn Gly Ala Ala Leu Arg Gly		
785	790	795
Glu Ile Glu Thr Val Lys Gln Leu His Glu Ala Ile Val Thr Leu Gly		
805	810	815
Leu Ala Glu Pro Ser Thr Asn Ile Ser Phe Pro Leu Val Thr Val His		
820	825	830
Leu Glu Lys Gly Asp Leu Ser Thr Ala Leu Glu Val Ala Ile Asp Cys		
835	840	845
Tyr Glu Lys Tyr Lys Val Leu Pro Arg Ile His Asp Val Leu Cys Lys		
850	855	860
Leu Val Glu Lys Gly Glu Thr Asp Leu Ile Gln Lys Ala Met Asp Phe		
865	870	875
		880

Val Ser Gln Glu Gln Gly Glu Met Val Met Leu Tyr Asp Leu Phe Phe  
885 890 895  
Ala Phe Leu Gln Thr Gly Asn Tyr Lys Glu Ala Lys Lys Ile Ile Glu  
900 905 910  
Thr Pro Gly Ile Arg Ala Arg Ser Ala Arg Leu Gln Trp Phe Cys Asp  
915 920 925  
Arg Cys Val Ala Asn Asn Gln Val Glu Thr Leu Glu Lys Leu Val Glu  
930 935 940  
Leu Thr Gln Lys Leu Phe Glu Cys Asp Arg Asp Gln Met Tyr Tyr Asn  
945 950 955 960  
Leu Leu Lys Leu Tyr Lys Ile Asn Gly Asp Trp Gln Arg Ala Asp Ala  
965 970 975  
Val Trp Asn Lys Ile Gln Glu Glu Asn Val Ile Pro Arg Glu Lys Thr  
980 985 990  
Leu Arg Leu Leu Ala Glu Ile Leu Arg Glu Gly Asn Gln Glu Val Pro  
995 1000 1005  
Phe Asp Val Pro Glu Leu Trp Tyr Glu Asp Glu Lys His Ser Leu Asn  
1010 1015 1020  
Ser Ser Ser Ala Ser Thr Thr Glu Pro Asp Phe Gln Lys Asp Ile Leu  
1025 1030 1035 1040  
Ile Ala Cys Arg Leu Asn Gln Lys Lys Gly Ala Tyr Asp Ile Phe Leu  
1045 1050 1055  
Asn Ala Lys Glu Gln Asn Ile Val Phe Asn Ala Glu Thr Tyr Ser Asn  
1060 1065 1070  
Leu Ile Lys Leu Leu Met Ser Glu Asp Tyr Phe Thr Gln Ala Met Glu  
1075 1080 1085  
Val Lys Ala Phe Ala Glu Thr His Ile Lys Gly Phe Thr Leu Asn Asp  
1090 1095 1100  
Ala Ala Asn Ser Arg Leu Ile Ile Thr Gln Val Arg Arg Asp Tyr Leu

1105	1110	1115	1120
Lys Glu Ala Val Thr Thr Leu Lys Thr Val Leu Asp Gln Gln Gln Thr			
1125	1130	1135	
Pro Ser Arg Leu Ala Val Thr Arg Val Ile Gln Ala Leu Ala Met Lys			
1140	1145	1150	
Gly Asp Val Glu Asn Ile Glu Val Val Gln Lys Met Leu Asn Gly Leu			
1155	1160	1165	
Glu Asp Ser Ile Gly Leu Ser Lys Met Val Phe Ile Asn Asn Ile Ala			
1170	1175	1180	
Leu Ala Gln Ile Lys Asn Asn Asp Ile Asp Ala Ala Ile Glu Asn Ile			
1185	1190	1195	1200
Glu Asn Met Leu Thr Ser Glu Asn Lys Val Ile Glu Pro Gln Tyr Phe			
1205	1210	1215	
Gly Leu Ala Tyr Leu Phe Arg Lys Val Ile Glu Glu Gln Leu Glu Pro			
1220	1225	1230	
Ala Val Glu Lys Ile Ser Ile Met Ala Glu Arg Leu Ala Asn Gln Phe			
1235	1240	1245	
Ala Ile Tyr Lys Pro Val Thr Asp Phe Phe Leu Gln Leu Val Asp Ala			
1250	1255	1260	
Gly Lys Val Asp Asp Ala Arg Ala Leu Leu Gln Arg Cys Gly Ala Ile			
1265	1270	1275	1280
Ala Glu Gln Thr Pro Ile Leu Leu Leu Phe Leu Leu Arg Asn Ser Arg			
1285	1290	1295	
Lys Gln Gly Lys Ala Ser Thr Val Lys Ser Val Leu Glu Leu Ile Pro			
1300	1305	1310	
Glu Leu Asn Glu Lys Glu Glu Ala Tyr Asn Ser Leu Met Lys Ser Tyr			
1315	1320	1325	
Val Ser Glu Lys Asp Val Thr Ser Ala Lys Ala Leu Tyr Glu His Leu			
1330	1335	1340	

Thr Ala Lys Asn Thr Lys Leu Asp Asp Leu Phe Leu Lys Arg Tyr Ala  
 1345                      1350                      1355                      1360  
 Ser Leu Leu Lys Tyr Ala Gly Glu Pro Val Pro Phe Ile Glu Pro Pro  
                     1365                      1370                      1375  
 Glu Ser Phe Glu Phe Tyr Ala Gln Gln Leu Arg Lys Leu Arg Glu Asn  
                     1380                      1385                      1390  
 Ser Ser

<210> 3700

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3700

Met Ile Val Tyr Leu Glu Asn Leu Ile Ile Ser Ala Pro Lys Leu Leu  
 1                      5                      10                      15  
 Lys Leu Ile Ser Lys Phe Asp Lys Val Ser Gly Tyr Lys Ile Asn Met  
                     20                      25                      30  
 Gln Lys Ser Gln Ala Phe Leu Tyr Ile Asn Asn Arg Gln Ser Glu Ser  
                     35                      40                      45  
 Gln Ile Met Ser Glu Leu Pro Phe Thr Ile Ala Thr Lys Arg Ile Lys  
                     50                      55                      60  
 Tyr Leu Gly Ile Gln Leu Thr Arg Asp Val Lys Asp Leu Phe Glu Glu  
 65                      70                      75                      80  
 Asn Tyr Glu Pro Leu Leu Lys Glu Ile Arg Glu Arg Thr Gln Thr Lys  
                     85                      90                      95  
 Asn Ile Pro Leu Ser Trp Ile Gly Ile Ile Asn Ile Val Lys Met Ala

100	105	110	
Thr Leu Pro Lys Val Ile Tyr Arg Ile Asn Ala Ile Pro Ile Glu Leu			
115	120	125	
Pro Leu Thr Phe Phe Thr Glu Leu Glu Lys Asn Asp Phe Lys Phe His			
130	135	140	
Met Glu Pro Lys Asn Ser Ser Tyr Ser Gln Asp Asn Pro Lys Gln Lys			
145	150	155	160
Arg Ala Lys Leu Glu Ala Ser Cys Tyr Leu Thr Ser Asn Cys Thr Thr			
165	170	175	
Val Leu Gln			

&lt;210&gt; 3701

&lt;211&gt; 731

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3701

Met Glu Arg Ser Asp Glu Glu Asn Leu Lys Glu Glu Cys Ser Ser Thr			
1	5	10	15
Glu Ser Thr Gln Gln Glu His Glu Asp Ala Pro Ser Thr Lys Leu Gln			
20	25	30	
Gly Glu Val Leu Ala Leu Glu Glu Glu Arg Ala Gln Val Leu Gly His			
35	40	45	
Val Glu Gln Leu Lys Val Arg Val Lys Glu Leu Glu Gln Gln Leu Gln			
50	55	60	
Glu Ser Ala Arg Glu Ala Glu Met Glu Arg Ala Leu Leu Gln Gly Glu			
65	70	75	80



Arg Glu Ala Glu Arg Ala Leu Leu Gln Lys Glu Gln Lys Ala Val Asp  
85 90 95  
Gln Leu Gln Glu Lys Leu Val Ala Leu Glu Thr Gly Ile Gln Lys Glu  
100 105 110  
Arg Asp Lys Glu Arg Ala Glu Leu Ala Ala Gly Arg Arg His Leu Glu  
115 120 125  
Ala Arg Gln Ala Leu Tyr Ala Glu Leu Gln Thr Gln Leu Asp Asn Cys  
130 135 140  
Pro Glu Ser Val Arg Glu Gln Leu Gln Glu Gln Leu Arg Arg Glu Ala  
145 150 155 160  
Glu Ala Leu Glu Thr Glu Thr Lys Leu Phe Glu Asp Leu Glu Phe Gln  
165 170 175  
Gln Leu Glu Arg Glu Ser Arg Val Glu Glu Glu Arg Glu Leu Ala Gly  
180 185 190  
Gln Gly Leu Leu Arg Ser Lys Ala Glu Leu Leu Arg Ser Ile Ala Lys  
195 200 205  
Arg Lys Glu Arg Leu Ala Ile Leu Asp Ser Gln Ala Gly Gln Ile Arg  
210 215 220  
Ala Gln Ala Val Gln Glu Ser Glu Arg Leu Ala Arg Asp Lys Asn Ala  
225 230 235 240  
Ser Leu Gln Leu Leu Gln Lys Glu Lys Glu Lys Leu Thr Val Leu Glu  
245 250 255  
Arg Arg Tyr His Ser Leu Thr Gly Gly Arg Pro Phe Pro Lys Thr Thr  
260 265 270  
Ser Thr Leu Lys Glu Met Glu Lys Leu Leu Leu Pro Ala Val Asp Leu  
275 280 285  
Glu Gln Trp Tyr Gln Glu Leu Met Ala Gly Leu Gly Thr Gly Pro Ala  
290 295 300  
Ala Ala Ser Pro His Ser Ser Pro Pro Pro Leu Pro Ala Lys Ala Ser

305                      310                      315                      320  
Arg Gln Leu Gln Val Tyr Arg Ser Lys Met Asp Gly Glu Ala Thr Ser  
                         325                      330                      335  
Pro Leu Pro Arg Thr Arg Ser Gly Pro Leu Pro Ser Ser Ser Gly Ser  
                         340                      345                      350  
Ser Ser Ser Ser Ser Gln Leu Ser Val Ala Thr Leu Gly Arg Ser Pro  
                         355                      360                      365  
Ser Pro Lys Ser Ala Leu Leu Thr Gln Asn Gly Thr Gly Ser Leu Pro  
                         370                      375                      380  
Arg Asn Leu Ala Ala Thr Leu Gln Asp Ile Glu Thr Lys Arg Gln Leu  
385                      390                      395                      400  
Ala Leu Gln Gln Lys Gly Gln Gln Val Ile Glu Glu Gln Arg Arg Arg  
                         405                      410                      415  
Leu Ala Glu Leu Lys Gln Lys Ala Ala Ala Glu Ala Gln Cys Gln Trp  
                         420                      425                      430  
Asp Ala Leu His Gly Ala Ala Pro Phe Pro Ala Gly Pro Ser Gly Phe  
                         435                      440                      445  
Pro Pro Leu Met His His Ser Ile Leu His His Leu Pro Ala Gly Arg  
                         450                      455                      460  
Glu Arg Gly Glu Glu Gly Glu His Ala Tyr Asp Thr Leu Ser Leu Glu  
465                      470                      475                      480  
Ser Ser Asp Ser Met Glu Thr Ser Ile Ser Thr Gly Gly Asn Ser Ala  
                         485                      490                      495  
Cys Ser Pro Asp Asn Met Ser Ser Val Ser Gly Leu Asp Met Gly Lys  
                         500                      505                      510  
Ile Glu Glu Met Glu Lys Met Leu Lys Glu Ala His Ala Glu Lys Asn  
                         515                      520                      525  
Arg Leu Met Glu Ser Arg Glu Arg Glu Met Glu Leu Arg Arg Gln Ala  
                         530                      535                      540

Leu Glu Glu Glu Arg Arg Arg Arg Glu Gln Val Glu Arg Arg Leu Gln  
545 550 555 560  
Ser Glu Ser Ala Arg Arg Gln Gln Leu Val Glu Lys Glu Val Lys Met  
565 570 575  
Arg Glu Lys Gln Phe Ser Gln Ala Arg Pro Leu Thr Arg Tyr Leu Pro  
580 585 590  
Ile Arg Lys Glu Asp Phe Asp Leu Lys Thr His Ile Glu Ser Ser Gly  
595 600 605  
His Gly Val Asp Thr Cys Leu His Val Val Leu Ser Ser Lys Val Cys  
610 615 620  
Arg Gly Tyr Leu Val Lys Met Gly Gly Lys Ile Lys Ser Trp Lys Lys  
625 630 635 640  
Arg Trp Phe Val Phe Asp Arg Leu Lys Arg Thr Leu Ser Tyr Tyr Val  
645 650 655  
Asp Lys His Glu Thr Lys Leu Lys Gly Val Ile Tyr Phe Gln Ala Ile  
660 665 670  
Glu Glu Val Tyr Tyr Asp His Leu Arg Ser Ala Ala Lys Ser Pro Asn  
675 680 685  
Pro Ala Leu Thr Phe Cys Val Lys Thr His Asp Arg Leu Tyr Tyr Met  
690 695 700  
Val Ala Pro Ser Ala Glu Ala Met Arg Ile Trp Met Asp Val Ile Val  
705 710 715 720  
Thr Gly Ala Glu Gly Tyr Thr Gln Phe Met Asn  
725 730

&lt;210&gt; 3702

&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3702

Met Leu Asn Thr Ser Val Pro Asn Asp Met Asp Glu Gln Gln Asn Ala  
1 5 10 15  
Arg Glu Ser Leu Glu Asp Gln Asn Leu Lys Asp Gln Asp His Leu Tyr  
20 25 30  
Glu Glu Glu Ile Gly Ala Val Gly Gly Ile Asp Tyr Asn Asp Thr Asn  
35 40 45  
Gln Asn Ala Gln Ser Glu Gln Asn Gly Ser Ser Asp Leu Leu Cys Asp  
50 55 60  
Leu Asn Thr Ser Ser Tyr Asp Thr Ser Ala Leu Cys Asn Gly Phe Pro  
65 70 75 80  
Leu Glu Asn Ile Cys Thr Gln Val Ile Asp Gln Asn Gln Asn Leu His  
85 90 95  
Gly Asp Ser Lys Gln Ser Asn Leu Thr Asn Gly Asp Tyr Val Ala Ser  
100 105 110  
Ser Asp Gly Thr Ser Lys Pro Ser Ser Ser Leu Ala Val Ala Ala Gln  
115 120 125  
Leu Arg Glu Ile Ile Pro Ser Ser Ala Leu Pro Asn Gly Thr Val Gln  
130 135 140  
His Ile Leu Met Pro Asp Asp Glu Gly Glu Gly Glu Leu Cys Trp Lys  
145 150 155 160  
Lys Val Asp Leu Gly Asp Val Lys Asn Val Asp Val Leu Ser Phe Ser  
165 170 175  
His Ala Pro Ser Phe Asn Phe Leu Ser Asn Ser Cys Trp Ser Lys Pro  
180 185 190  
Lys Glu Asp Lys Ala Val Asp Thr Ser Asp Leu Glu Val Ala Glu Asp  
195 200 205

Pro Met Gly Leu Gln Gly Ile Asp Leu Ile Thr Ala Ala Leu Leu Phe  
 210 215 220  
 Cys Leu Gly Asp Ser Pro Gly Gly Arg Gly Ile Ser Asp Ser Arg Met  
 225 230 235 240  
 Ala Asp Ile Tyr His Ile Asp Val Gly Thr Gln Thr Phe Ser Leu Pro  
 245 250 255  
 Ser Ala Ile Leu Ala Thr Ser Thr Met Val Gly Glu Ile Ala Ser Ala  
 260 265 270  
 Ser Ala Cys Asp His Ala Asn Pro Gln Leu Ser Asn Pro Ser Pro Phe  
 275 280 285  
 Gln Thr Leu Gly Leu Asp Leu Val Leu Glu Cys Val Ala Arg Tyr Gln  
 290 295 300  
 Pro Lys Gln Arg Ser Met Phe Thr Phe Val Cys Gly Gln Leu Phe Arg  
 305 310 315 320  
 Arg Lys Glu Phe Ser Ser His Phe Lys Asn Val His Gly Asp Ile His  
 325 330 335  
 Ala Gly Leu Asn Gly  
 340

&lt;210&gt; 3703

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3703

Met Phe Leu Gln Cys Met Leu Val Cys Met Leu Leu Ser Ile Phe Gln  
 1 5 10 15  
 Ile Ile Tyr Leu Met Tyr Ile Ile Arg Ser Glu Ile Ala Asp Gln Lys

20	25	30
Ala Cys Ile Phe Leu Lys Ala Arg Asp Ser Tyr Gly Gln Leu Ala Pro		
35	40	45
Arg Lys Val Pro Val Phe Ser Thr Gly Phe Ser Met Ser Arg Gly Ala		
50	55	60
Glu Ile Ile Val Gly Ala Gly Cys Arg Val Trp Arg Val Gln Phe Val		
65	70	75
80		
Leu Ala Val Gly Phe Val Glu Val Val Leu Trp Lys Thr Tyr Arg Gln		
85	90	95
Met Pro Ser Phe Pro Ser Leu Ser Gln Glu Glu Ala Thr Trp Gln Glu		
100	105	110
Gln Glu Ala Pro Arg Arg Asp Thr Pro Thr Glu Ser Ser Cys Ala Val		
115	120	125
Ala Ala Ile Gly Thr Leu Glu Gly Ser Pro Pro Gly Ile Ser Thr Ser		
130	135	140
Phe Phe Arg Lys Val Leu Gly Trp Pro Leu Arg Leu Pro Arg Asp Leu		
145	150	155
160		
Cys Asn Trp Met Gln Gly Leu Leu Gln Ala Ala Gly Leu His Ile Arg		
165	170	175
Asp Asn Ala Tyr Asn Tyr Cys Tyr Met Tyr Glu Leu Leu Ser Leu Gly		
180	185	190
Leu Pro Leu Leu Trp Ala Phe Ser Glu Val Leu Ala Ala Met Tyr Arg		
195	200	205
Glu Ser Glu Gly Ser Leu Glu Ser Ile Cys Asn Trp Val Leu Arg Cys		
210	215	220
Phe Pro Val Lys Leu Arg		
225	230	

&lt;210&gt; 3704

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3704

Met Val Gln Gly Met Cys Ser Pro Ser Pro Phe Gly Thr Ser Arg Ala

1 5 10 15

Cys Thr Val Gly Thr Gln Val Asp Ser Arg Ser Leu Pro Trp Ala Leu

20 25 30

Gly Ala Ser Ala Gln Arg Gly Asn Ile Pro Thr Ala Thr Cys Ala Arg

35 40 45

Thr Ala Gly Thr Leu Arg Arg Gly Leu Gln Pro Gly Trp Gly Trp Glu

50 55 60

Asp Phe Leu Asp Glu Gly Gln Pro Gly Phe Ser Ser Arg Met Ser Trp

65 70 75 80

Ser Arg Pro Pro Ala Gln Glu Gln Gly Ala Gly Arg Gly Pro Ser Trp

85 90 95

Val Arg Gly Leu Gly Gln Pro Thr Ala Ala Phe Glu Gln Gly Pro Arg

100 105 110

Ser Ser Val Ser Pro Gln Trp Glu Gly Gly Gly Gln Gly Pro Gly Glu

115 120 125

Leu Gly Arg Lys His Leu Leu Gly Pro Ser Gln His His Pro Thr Asp

130 135 140

Arg His

145

&lt;210&gt; 3705

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3705

Met His Ser Met Asp Pro Gln Leu Glu Arg Gln Met Glu Thr Thr Gln

1 5 10 15

Asn Leu Val Asp Ser Tyr Met Ala Ile Val Asn Lys Thr Val Trp Asn

20 25 30

Leu Met Val Gly Ala Lys Pro Lys Thr Ile Met His Ile Met Ile Tyr

35 40 45

Asn Val His Ala Pro Pro His Gly Asp Gln Gly Val His Leu Leu Gly

50 55 60

Ala Ala Val Gln Pro Ala Leu Ala Trp Glu Arg Glu Asp Thr His Gly

65 70 75 80

Gly Val Gly Arg Ala Gly Thr Ala Ala Arg Arg Asp Ala Ala Ser Gln

85 90 95

Ser Cys Cys Pro Thr Cys Thr Arg Val Gly Thr Arg Arg His Ser Trp

100 105 110

Arg Ser Arg Gln Ser Arg His Ser Gly Ala Thr Arg Leu Ala Trp Glu

115 120 125

Glu Ile Asp Thr Pro Gly Gly Val Gly Arg Ala Gly Thr Ala Ala Arg

130 135 140

Arg Asp Ser Arg Gly Asn Glu Lys Thr Leu Leu Glu Ala Ser Ala Glu

145 150 155 160

Gln Ala Asp Gln Gly Val His Leu Leu Gly Ala Ala Val Gln Pro Ala

165 170 175

Leu Ala



&lt;210&gt; 3706

&lt;211&gt; 736

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3706

Met Tyr Arg Glu Met Lys Asp Ser Asp Lys Glu Lys Glu Asn Gly Lys

1 5 10 15

Met Gly Cys Trp Ser Ile Glu His Val Glu Gln Tyr Leu Gly Thr Asp

20 25 30

Glu Leu Pro Lys Asn Asp Leu Ile Thr Tyr Leu Gln Lys Asn Ala Asp

35 40 45

Ala Ala Phe Leu Arg His Trp Lys Leu Thr Gly Thr Asn Lys Ser Ile

50 55 60

Arg Lys Asn Arg Asn Cys Ser Gln Leu Ile Ala Ala Tyr Lys Asp Phe

65 70 75 80

Cys Glu His Gly Thr Lys Ser Gly Leu Asn Gln Gly Ala Ile Ser Thr

85 90 95

Leu Gln Ser Ser Asp Ile Leu Asn Leu Thr Lys Glu Gln Pro Gln Ala

100 105 110

Lys Ala Gly Asn Gly Gln Asn Ser Cys Gly Val Glu Asp Val Leu Gln

115 120 125

Leu Leu Arg Ile Leu Tyr Ile Val Ala Ser Asp Pro Tyr Ser Arg Ile

130 135 140

Ser Gln Glu Asp Gly Asp Glu Gln Pro Gln Phe Thr Phe Pro Pro Asp

145 150 155 160

Glu Phe Thr Ser Lys Lys Ile Thr Thr Lys Ile Leu Gln Gln Ile Glu

165	170	175
Glu Pro Leu Ala Leu Ala Ser Gly Ala Leu Pro Asp Trp Cys Glu Gln		
180	185	190
Leu Thr Ser Lys Cys Pro Phe Leu Ile Pro Phe Glu Thr Arg Gln Leu		
195	200	205
Tyr Phe Thr Cys Thr Ala Phe Gly Ala Ser Arg Ala Ile Val Trp Leu		
210	215	220
Gln Asn Arg Arg Glu Ala Thr Val Glu Arg Thr Arg Thr Thr Ser Ser		
225	230	235
240		
Val Arg Arg Asp Asp Pro Gly Glu Phe Arg Val Gly Arg Leu Lys His		
245	250	255
Glu Arg Val Lys Val Pro Arg Gly Glu Ser Leu Met Glu Trp Ala Glu		
260	265	270
Asn Val Met Gln Ile His Ala Asp Arg Lys Ser Val Leu Glu Val Glu		
275	280	285
Phe Leu Gly Glu Glu Gly Thr Gly Leu Gly Pro Thr Leu Glu Phe Tyr		
290	295	300
Ala Leu Val Ala Ala Glu Phe Gln Arg Thr Asp Leu Gly Ala Trp Leu		
305	310	315
320		
Cys Asp Asp Asn Phe Pro Asp Asp Glu Ser Arg His Val Asp Leu Gly		
325	330	335
Gly Gly Leu Lys Pro Pro Gly Tyr Tyr Val Gln Arg Ser Cys Gly Leu		
340	345	350
Phe Thr Ala Pro Phe Pro Gln Asp Ser Asp Glu Leu Glu Arg Ile Thr		
355	360	365
Lys Leu Phe His Phe Leu Gly Ile Phe Leu Ala Lys Cys Ile Gln Asp		
370	375	380
Asn Arg Leu Val Asp Leu Pro Ile Ser Lys Pro Phe Phe Lys Leu Met		
385	390	395
400		

Cys Met Gly Asp Ile Lys Ser Asn Met Ser Lys Leu Ile Tyr Glu Ser  
405 410 415  
Arg Gly Asp Arg Asp Leu His Cys Thr Glu Ser Gln Ser Glu Ala Ser  
420 425 430  
Thr Glu Glu Gly His Asp Ser Leu Ser Val Gly Ser Leu Glu Glu Asp  
435 440 445  
Ser Lys Ser Glu Phe Ile Leu Asp Pro Pro Lys Pro Lys Pro Pro Ala  
450 455 460  
Trp Phe Asn Gly Ile Leu Thr Trp Glu Asp Phe Glu Leu Val Asn Pro  
465 470 475 480  
His Arg Ala Arg Phe Leu Lys Glu Ile Lys Asp Leu Ala Ile Lys Arg  
485 490 495  
Arg Gln Ile Leu Ser Asn Lys Gly Leu Ser Glu Asp Glu Lys Asn Thr  
500 505 510  
Lys Leu Gln Glu Leu Val Leu Lys Asn Pro Ser Gly Ser Gly Pro Pro  
515 520 525  
Leu Ser Ile Glu Asp Leu Gly Leu Asn Phe Gln Phe Cys Pro Ser Ser  
530 535 540  
Arg Ile Tyr Gly Phe Thr Ala Val Asp Leu Lys Pro Ser Gly Glu Asp  
545 550 555 560  
Glu Met Ile Thr Met Asp Asn Ala Glu Glu Tyr Val Asp Leu Met Phe  
565 570 575  
Asp Phe Cys Met His Thr Gly Ile Gln Lys Gln Met Glu Ala Phe Arg  
580 585 590  
Asp Gly Phe Asn Lys Val Phe Pro Met Glu Lys Leu Ser Ser Phe Ser  
595 600 605  
His Glu Glu Val Gln Met Ile Leu Cys Gly Asn Gln Ser Pro Ser Trp  
610 615 620  
Ala Ala Glu Asp Ile Ile Asn Tyr Thr Glu Pro Lys Leu Gly Tyr Thr

625                      630                      635                      640  
 Arg Asp Ser Pro Gly Phe Leu Arg Phe Val Arg Val Leu Cys Gly Met  
                                 645                      650                      655  
 Ser Ser Asp Glu Arg Lys Ala Phe Leu Gln Phe Thr Thr Gly Cys Ser  
                                 660                      665                      670  
 Thr Leu Pro Pro Gly Gly Leu Ala Asn Leu His Pro Arg Leu Thr Val  
                                 675                      680                      685  
 Val Arg Lys Val Asp Ala Thr Asp Ala Ser Tyr Pro Ser Val Asn Thr  
                                 690                      695                      700  
 Cys Val His Tyr Leu Lys Leu Pro Glu Tyr Ser Ser Glu Glu Ile Met  
 705                      710                      715                      720  
 Arg Glu Arg Leu Leu Ala Ala Thr Met Glu Lys Gly Phe His Leu Asn  
                                 725                      730                      735

<210> 3707

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3707

Met Pro Leu Leu Ala Phe Pro Gly Pro Ala Pro Ala Cys Trp Arg Pro  
     1                      5                      10                      15  
 Leu Asp Val Gln Pro Leu Pro Gln Gln Trp Ala Leu His Ala His Leu  
                                 20                      25                      30  
 Leu Pro Gly Arg Gly Leu Phe Gly Pro Gly Ser Arg Leu Gly Ala Ala  
                                 35                      40                      45  
 Pro Ala Gly Pro Ala Pro Ala Ser Arg Pro Ser Gly Gly Gln Ala His  
                                 50                      55                      60

出証特 2 0 0 4 - 3 0 5 9 6 6 0

20 25 30  
Ala Leu Thr Ile Leu Ser Glu Trp Gln Glu Trp Glu Gly Ala Arg Gly  
35 40 45  
Ser Gly Glu Leu Trp Asn Pro Glu Met Trp Gln Gly Val Ala Arg Glu  
50 55 60  
Gly Tyr Trp Gly Ser Trp Gly Ala Leu Ser Pro Ala Gln Cys Ser Thr  
65 70 75 80  
Glu Pro Cys Ser Ser Thr Ala Cys Pro Trp Ser Phe Trp Pro Ser Ser  
85 90 95  
Thr Gly Arg Ser Thr Thr Glu Ala Trp Gly Val Gly Thr Gly Leu Arg  
100 105 110  
Arg Gly Lys Gln Lys Ala Ala Ser Gly Val Leu Ile Lys Leu Leu Phe  
115 120 125  
Ile Ser Thr Cys Gln Leu Leu His Gly Ala Arg Gly Arg Arg Leu Glu  
130 135 140  
Thr Arg Glu Glu Ser Arg Ser Arg Gln Met Leu Asp Pro Arg Gly Leu  
145 150 155 160  
Gln Ala Trp Pro Ala Ala Thr Leu Val Asp Leu Ala Leu Gly Leu Gly  
165 170 175  
Ser

&lt;210&gt; 3709

&lt;211&gt; 509

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3709

Met Glu Leu Lys Lys Ser Pro Asp Gly Gly Trp Gly Trp Val Ile Val  
 1 5 10 15  
 Phe Val Ser Phe Leu Thr Gln Phe Leu Cys Tyr Gly Ser Pro Leu Ala  
 20 25 30  
 Val Gly Val Leu Tyr Ile Glu Trp Leu Asp Ala Phe Gly Glu Gly Lys  
 35 40 45  
 Gly Lys Thr Ala Trp Val Gly Ser Leu Ala Ser Gly Val Gly Leu Leu  
 50 55 60  
 Ala Ser Pro Val Cys Ser Leu Cys Val Ser Ser Phe Gly Ala Arg Pro  
 65 70 75 80  
 Val Thr Ile Phe Ser Gly Phe Met Val Ala Gly Gly Leu Met Leu Ser  
 85 90 95  
 Ser Phe Ala Pro Asn Ile Tyr Phe Leu Phe Phe Ser Tyr Gly Ile Val  
 100 105 110  
 Val Gly Leu Gly Cys Gly Leu Leu Tyr Thr Ala Thr Val Thr Ile Thr  
 115 120 125  
 Cys Gln Tyr Phe Asp Asp Arg Arg Gly Leu Ala Leu Gly Leu Ile Ser  
 130 135 140  
 Thr Gly Ser Ser Val Gly Leu Phe Ile Tyr Ala Ala Leu Gln Arg Met  
 145 150 155 160  
 Leu Val Glu Phe Tyr Gly Leu Asp Gly Cys Leu Leu Ile Val Gly Ala  
 165 170 175  
 Leu Ala Leu Asn Ile Leu Ala Cys Gly Ser Leu Met Arg Pro Leu Gln  
 180 185 190  
 Ser Ser Asp Cys Pro Leu Pro Lys Lys Ile Ala Pro Glu Asp Leu Pro  
 195 200 205  
 Asp Lys Tyr Ser Ile Tyr Asn Glu Lys Gly Lys Asn Leu Glu Glu Asn  
 210 215 220  
 Ile Asn Ile Leu Asp Lys Ser Tyr Ser Ser Glu Glu Lys Cys Arg Ile

225                      230                      235                      240  
Thr Leu Ala Asn Gly Asp Trp Lys Gln Asp Ser Leu Leu His Lys Asn  
                         245                      250                      255  
Pro Thr Val Thr His Thr Lys Glu Pro Glu Thr Tyr Lys Lys Lys Val  
                         260                      265                      270  
Ala Glu Gln Thr Tyr Phe Cys Lys Gln Leu Ala Lys Arg Lys Trp Gln  
                         275                      280                      285  
Leu Tyr Lys Asn Tyr Cys Gly Glu Thr Val Ala Leu Phe Lys Asn Lys  
                         290                      295                      300  
Val Phe Ser Ala Leu Phe Ile Ala Ile Leu Leu Phe Asp Ile Gly Gly  
305                      310                      315                      320  
Phe Pro Pro Ser Leu Leu Met Glu Asp Val Ala Arg Ser Ser Asn Val  
                         325                      330                      335  
Lys Glu Glu Glu Phe Ile Met Pro Leu Ile Ser Ile Ile Gly Ile Met  
                         340                      345                      350  
Thr Ala Val Gly Lys Leu Leu Leu Gly Ile Leu Ala Asp Phe Lys Trp  
                         355                      360                      365  
Ile Asn Thr Leu Tyr Leu Tyr Val Ala Thr Leu Ile Ile Met Gly Leu  
                         370                      375                      380  
Ala Leu Cys Ala Ile Pro Phe Ala Lys Ser Tyr Val Thr Leu Ala Leu  
385                      390                      395                      400  
Leu Ser Gly Ile Leu Gly Phe Leu Thr Gly Asn Trp Ser Ile Phe Pro  
                         405                      410                      415  
Tyr Val Thr Thr Lys Thr Val Gly Ile Glu Lys Leu Ala His Ala Tyr  
                         420                      425                      430  
Gly Ile Leu Met Phe Phe Ala Gly Leu Gly Asn Ser Leu Gly Pro Pro  
                         435                      440                      445  
Ile Val Gly Trp Phe Tyr Asp Trp Thr Gln Thr Tyr Asp Ile Ala Phe  
                         450                      455                      460



Tyr Phe Ser Gly Phe Cys Val Leu Leu Gly Gly Phe Ile Leu Leu Leu  
 465                      470                      475                      480  
 Ala Ala Leu Pro Ser Trp Asp Thr Cys Asn Lys Gln Leu Pro Lys Pro  
                          485                      490                      495  
 Ala Pro Thr Thr Phe Leu Tyr Lys Val Ala Ser Asn Val  
                          500                      505

<210> 3710

<211> 672

<212> PRT

<213> Homo sapiens

<400> 3710

Met Val Val Ser Ala Gly Pro Trp Ser Ser Glu Lys Ala Glu Met Asn  
 1                      5                      10                      15  
 Ile Leu Glu Ile Asn Glu Lys Leu Arg Pro Gln Leu Ala Glu Asn Lys  
                          20                      25                      30  
 Gln Gln Phe Arg Asn Leu Lys Glu Lys Cys Phe Val Thr Gln Leu Ala  
                          35                      40                      45  
 Gly Phe Leu Ala Asn Arg Gln Lys Lys Tyr Lys Tyr Glu Glu Cys Lys  
                          50                      55                      60  
 Asp Leu Ile Lys Ser Met Leu Arg Asn Glu Arg Gln Phe Lys Glu Glu  
 65                      70                      75                      80  
 Met Leu Ala Glu Gln Leu Lys Gln Ala Glu Glu Leu Arg Gln Tyr Lys  
                          85                      90                      95  
 Val Leu Val His Ser Gln Glu Arg Glu Leu Thr Gln Leu Arg Glu Lys  
                          100                      105                      110  
 Leu Arg Glu Gly Arg Asp Ala Ser Arg Ser Leu Asn Gln His Leu Gln

115 120 125  
Ala Leu Leu Thr Pro Asp Glu Pro Glu Lys Ser Gln Gly Gln Asp Leu  
130 135 140  
Gln Glu Gln Leu Ala Glu Gly Cys Arg Leu Ala Gln His Leu Val Gln  
145 150 155 160  
Lys Leu Ser Pro Glu Asn Asp Asn Asp Asp Asp Glu Asp Val Gln Val  
165 170 175  
Glu Val Ala Glu Lys Val Gln Lys Ser Ser Ala Pro Arg Glu Met Gln  
180 185 190  
Lys Ala Glu Glu Lys Glu Val Pro Glu Asp Ser Leu Glu Glu Cys Ala  
195 200 205  
Ile Thr Cys Ser Asn Ser His Gly Pro Tyr Asp Ser Asn Gln Pro His  
210 215 220  
Arg Lys Thr Lys Ile Thr Phe Glu Glu Asp Lys Val Asp Ser Thr Leu  
225 230 235 240  
Ile Gly Ser Ser Pro His Val Glu Trp Glu Asp Ala Val His Ile Ile  
245 250 255  
Pro Glu Asn Glu Ser Asp Asp Glu Glu Glu Glu Glu Lys Gly Pro Val  
260 265 270  
Ser Pro Arg Asn Leu Gln Glu Ser Glu Glu Glu Glu Val Pro Gln Glu  
275 280 285  
Ser Trp Asp Glu Gly Tyr Ser Thr Leu Ser Ile Pro Pro Glu Met Leu  
290 295 300  
Ala Ser Tyr Lys Ser Tyr Ser Ser Thr Phe His Ser Leu Glu Glu Gln  
305 310 315 320  
Gln Val Cys Met Ala Val Asp Ile Gly Arg Tyr Arg Trp Asp Gln Val  
325 330 335  
Lys Lys Glu Asp Gln Glu Ala Thr Gly Pro Arg Leu Ser Arg Glu Leu  
340 345 350

Leu Asp Glu Lys Glu Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys  
355 360 365  
Tyr Ser Thr Pro Ser Gly Cys Leu Glu Leu Thr Asp Ser Cys Gln Pro  
370 375 380  
Tyr Arg Ser Ala Phe Tyr Val Leu Glu Gln Gln Arg Val Gly Leu Ala  
385 390 395 400  
Val Asp Met Asp Glu Ile Glu Lys Tyr Gln Glu Val Glu Glu Asp Gln  
405 410 415  
Asp Pro Ser Cys Pro Arg Leu Ser Arg Glu Leu Leu Asp Glu Lys Glu  
420 425 430  
Pro Glu Val Leu Gln Asp Ser Leu Asp Arg Cys His Ser Thr Pro Ser  
435 440 445  
Gly Tyr Leu Glu Leu Pro Asp Leu Gly Gln Pro Tyr Ser Ser Ala Val  
450 455 460  
Tyr Ser Leu Glu Glu Gln Tyr Leu Gly Leu Ala Leu Asp Met Asp Arg  
465 470 475 480  
Ile Lys Lys Asp Gln Glu Glu Glu Glu Asp Gln Gly Pro Pro Cys Pro  
485 490 495  
Arg Leu Ser Arg Glu Leu Leu Glu Val Val Glu Pro Glu Val Leu Gln  
500 505 510  
Asp Ser Leu Asp Arg Cys Tyr Ser Thr Pro Ser Ser Cys Leu Glu Gln  
515 520 525  
Pro Asp Ser Cys Gln Pro Tyr Gly Ser Ser Phe Tyr Ala Leu Glu Glu  
530 535 540  
Lys His Val Gly Phe Ser Leu Asp Val Gly Glu Ile Glu Lys Lys Gly  
545 550 555 560  
Lys Gly Lys Lys Arg Arg Gly Arg Arg Ser Lys Lys Lys Arg Arg Arg  
565 570 575  
Arg Gly Arg Lys Glu Gly Glu Glu Asp Gln Asn Pro Pro Cys Pro Arg

580	585	590
Leu Asn Gly Val Leu Met Glu Val Glu Glu Pro Glu Val Leu Gln Asp		
595	600	605
Ser Leu Asp Arg Cys Tyr Ser Thr Pro Leu Met Tyr Phe Glu Leu Pro		
610	615	620
Asp Ser Phe Gln His Tyr Arg Ser Val Phe Tyr Ser Phe Glu Glu Gln		
625	630	635
His Ile Ser Phe Ala Leu Tyr Val Asp Asn Arg Phe Phe Thr Leu Thr		
645	650	655
Val Thr Ser Leu His Leu Val Phe Gln Met Gly Val Ile Phe Pro Gln		
660	665	670

&lt;210&gt; 3711

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3711

Met Leu Asn Ser Leu Met Lys Arg Asp Leu Glu Lys His Leu Asn Val
1 5 10 15
Ser Lys Lys Phe His Gln Val Ser Ile Leu Leu Gly Ile Glu Leu Leu
20 25 30
Tyr Gln Val Asn Phe Ser Arg Glu Ala Leu Gln Glu Arg Arg Ala Arg
35 40 45
Cys Glu Thr Gln Asn Ile Asp Pro Val Val Trp Thr Asn Gln Arg Val
50 55 60
Leu Lys Trp Val Arg Asp Ile Asp Leu Lys Glu Tyr Ala Asp Asn Leu
65 70 75 80

Thr Asn Ser Gly Val His Gly Ala Val Leu Val Leu Glu Pro Thr Phe  
                             85                            90                            95  
 Asn Ala Glu Ala Met Ala Thr Ala Leu Gly Ile Pro Ser Gly Lys His  
                             100                            105                            110  
 Ile Leu Arg Arg His Leu Ala Glu Glu Met Ser Ala Val Phe His Pro  
                             115                            120                            125  
 Ala Asn Ser Thr Gly Ile Arg Glu Ala Glu Arg Phe Gly Thr Pro Pro  
                             130                            135                            140  
 Gly Arg Ala Ser Ser Val Thr Arg Thr Gly Lys Glu Glu Asn Ser Ser  
 145                            150                            155                            160  
 Gly Leu Lys Tyr Lys Ala Gly Arg Leu Pro Leu Gly Lys Ile Gly Arg  
                             165                            170                            175  
 Gly Phe Ser Ser Lys Asp Pro Asp Phe His Asp Asp Tyr Gly Ser Leu  
                             180                            185                            190  
 Gln Asn Glu Asp Cys Gly Asp Asp Asp Pro Gln Ser Arg Leu Glu Gln  
                             195                            200                            205  
 Cys Arg Leu Glu Gly Tyr Asn Ser Leu Glu Val Thr Asn Val  
                             210                            215                            220

&lt;210&gt; 3712

&lt;211&gt; 575

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3712

Met Tyr Ala Gly Asn Ile Pro Ile Tyr Lys Thr Glu Ser Arg Ser Arg  
           1                            5                            10                            15  
 Asn Glu Gln Gly Met Asp Pro Ile Thr Arg Gln Val Gly Gln His Ile

20	25	30	
Glu Met Glu Pro Glu Trp Glu Ala Ala Phe Thr Leu Gln Met Lys Leu			
35	40	45	
Thr His Val Ile Ser Met Met Gln Asp Trp Cys Ala Ser Asp Glu Lys			
50	55	60	
Val Leu Ile Glu Ala Tyr Lys Lys Cys Leu Ala Val Leu Met Gln Cys			
65	70	75	80
His Gly Gly Tyr Thr Asp Gly Glu Gln Pro Ile Thr Leu Ser Ile Cys			
85	90	95	
Gly His Ser Val Glu Thr Ile Arg Tyr Cys Val Ser Gln Glu Lys Val			
100	105	110	
Ser Ile His Leu Pro Val Ser Arg Leu Leu Ala Gly Leu His Val Leu			
115	120	125	
Leu Ser Lys Ser Glu Val Ala Tyr Lys Phe Pro Glu Leu Leu Pro Leu			
130	135	140	
Ser Glu Leu Ser Pro Pro Met Leu Ile Glu His Pro Leu Arg Cys Leu			
145	150	155	160
Val Leu Cys Ala Gln Val His Ala Gly Met Trp Arg Arg Asn Gly Phe			
165	170	175	
Ser Leu Val Asn Gln Ile Tyr Tyr Tyr His Asn Val Lys Cys Arg Arg			
180	185	190	
Glu Met Phe Asp Lys Asp Val Val Met Leu Gln Thr Gly Val Ser Met			
195	200	205	
Met Asp Pro Asn His Phe Leu Met Ile Met Leu Ser Arg Phe Glu Leu			
210	215	220	
Tyr Gln Ile Phe Ser Thr Pro Asp Tyr Gly Lys Arg Phe Ser Ser Glu			
225	230	235	240
Ile Thr His Lys Asp Val Val Gln Gln Asn Asn Thr Leu Ile Glu Glu			
245	250	255	

Met Leu Tyr Leu Ile Ile Met Leu Val Gly Glu Arg Phe Ser Pro Gly  
260 265 270

Val Gly Gln Val Asn Ala Thr Asp Glu Ile Lys Arg Glu Ile Ile His  
275 280 285

Gln Leu Ser Ile Lys Pro Met Ala His Ser Glu Leu Val Lys Ser Leu  
290 295 300

Pro Glu Asp Glu Asn Lys Glu Thr Gly Met Glu Ser Val Ile Glu Ala  
305 310 315 320

Val Ala His Phe Lys Lys Pro Gly Leu Thr Gly Arg Gly Met Tyr Glu  
325 330 335

Leu Lys Pro Glu Cys Ala Lys Glu Phe Asn Leu Tyr Phe Tyr His Phe  
340 345 350

Ser Arg Ala Glu Gln Ser Lys Ala Glu Glu Ala Gln Arg Lys Leu Arg  
355 360 365

Arg Gln Asn Arg Glu Asp Thr Ala Leu Pro Pro Pro Val Leu Pro Pro  
370 375 380

Phe Cys Pro Leu Phe Ala Ser Leu Val Asn Ile Leu Gln Ser Asp Val  
385 390 395 400

Met Leu Cys Ile Met Gly Thr Ile Leu Gln Trp Ala Val Glu His Asn  
405 410 415

Gly Tyr Ala Trp Ser Glu Ser Met Leu Gln Arg Val Leu His Leu Ile  
420 425 430

Gly Met Ala Leu Gln Glu Glu Lys Gln His Leu Glu Asn Val Thr Glu  
435 440 445

Glu His Val Val Thr Phe Thr Phe Thr Gln Lys Ile Ser Lys Pro Gly  
450 455 460

Glu Ala Pro Lys Asn Ser Pro Ser Ile Leu Ala Met Leu Glu Thr Leu  
465 470 475 480

Gln Asn Ala Pro Tyr Leu Glu Val His Lys Asp Met Ile Arg Trp Ile

	485		490		495										
Leu	Lys	Thr	Phe	Asn	Ala	Val	Lys	Lys	Met	Arg	Glu	Ser	Ser	Pro	Thr
	500						505						510		
Ser	Pro	Val	Ala	Glu	Thr	Glu	Gly	Thr	Ile	Met	Glu	Glu	His	Asn	Phe
	515						520						525		
Arg	Val	Gln	Gly	Thr	Lys	Thr	Lys	Leu	Arg	Gly	Arg	Glu	Lys	Gln	Arg
	530						535						540		
Leu	Pro	Asp	Cys	Ala	Glu	Lys	Arg	Ser	Trp	Leu	Arg	Cys	Leu	Lys	Cys
545						550				555				560	
Ser	Gly	Ile	Leu	Leu	Met	Lys	Thr	Lys	Asn	Ser	Phe	Ser	Arg	His	
			565						570					575	

&lt;210&gt; 3713

&lt;211&gt; 617

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3713

Met	Gly	Glu	Thr	Leu	Lys	Asp	Pro	Val	Ile	Lys	Arg	Cys	Cys	Glu	Ala
1				5					10					15	
Pro	Asn	Arg	Leu	Ser	Asp	Leu	Gln	Asn	Val	Ser	Glu	Gly	Leu	Glu	Lys
			20					25					30		
Cys	Gln	Lys	Ser	Leu	Asn	Asp	Tyr	Leu	Asp	Ser	Lys	Arg	Asn	Ala	Phe
		35					40					45			
Pro	Arg	Phe	Phe	Phe	Ile	Ser	Asp	Asp	Glu	Leu	Leu	Ser	Ile	Leu	Gly
		50				55					60				
Ser	Ser	Asp	Pro	Leu	Cys	Val	Gln	Glu	His	Met	Ile	Lys	Met	Tyr	Asp
65						70					75				80



Asn Ile Ala Ser Leu Arg Phe Asn Asp Gly Asp Ser Gly Glu Lys Leu  
85 90 95  
Val Ser Ala Met Ile Ser Ala Glu Gly Glu Val Met Glu Phe Arg Lys  
100 105 110  
Ile Val Arg Ala Glu Gly Arg Val Glu Asp Trp Met Thr Ala Val Leu  
115 120 125  
Asn Glu Met Arg Arg Thr Asn Arg Leu Ile Thr Lys Glu Ala Ile Phe  
130 135 140  
Arg Tyr Cys Glu Asp Arg Ser Arg Val Asp Trp Met Leu Leu Tyr Gln  
145 150 155 160  
Gly Met Val Val Leu Ala Ala Ser Gln Val Trp Trp Thr Trp Glu Val  
165 170 175  
Glu Asp Val Phe His Lys Ala Gln Lys Gly Glu Lys Gln Ala Met Lys  
180 185 190  
Asn Tyr Gly Arg Lys Met His Arg Gln Ile Asp Glu Leu Val Thr Arg  
195 200 205  
Ile Thr Met Pro Leu Ser Lys Asn Asp Arg Lys Lys Tyr Asn Thr Val  
210 215 220  
Leu Ile Ile Asp Val His Ala Arg Asp Ile Val Asp Ser Phe Ile Arg  
225 230 235 240  
Gly Ser Ile Leu Glu Ala Arg Glu Phe Asp Trp Glu Ser Gln Leu Arg  
245 250 255  
Phe Tyr Trp Asp Arg Glu Pro Asp Glu Leu Asn Ile Arg Gln Cys Thr  
260 265 270  
Gly Thr Phe Gly Tyr Gly Tyr Glu Tyr Met Gly Leu Asn Gly Arg Leu  
275 280 285  
Val Ile Thr Pro Leu Thr Asp Arg Ile Tyr Leu Thr Leu Thr Gln Ala  
290 295 300  
Leu Ser Met Tyr Leu Gly Gly Ala Pro Ala Gly Pro Ala Gly Thr Gly

305                      310                      315                      320  
Lys Thr Glu Thr Thr Lys Asp Leu Ala Lys Ala Leu Gly Leu Leu Cys  
                         325                      330                      335  
Val Val Thr Asn Cys Gly Glu Gly Met Asp Tyr Arg Ala Val Gly Lys  
                         340                      345                      350  
Ile Phe Ser Gly Leu Ala Gln Cys Gly Ala Trp Gly Cys Phe Asp Glu  
                         355                      360                      365  
Phe Asn Arg Ile Asp Ala Ser Val Leu Ser Val Ile Ser Ser Gln Ile  
                         370                      375                      380  
Gln Thr Ile Arg Asn Ala Leu Ile His Gln Leu Thr Thr Phe Gln Phe  
385                      390                      395                      400  
Glu Gly Gln Glu Ile Ser Leu Asp Ser Arg Met Gly Ile Phe Ile Thr  
                         405                      410                      415  
Met Asn Pro Gly Tyr Ala Gly Arg Thr Glu Leu Pro Glu Ser Val Lys  
                         420                      425                      430  
Ala Leu Phe Arg Pro Val Val Val Ile Val Pro Asp Leu Gln Gln Ile  
                         435                      440                      445  
Cys Glu Ile Met Leu Phe Ser Glu Gly Phe Leu Glu Ala Lys Thr Leu  
                         450                      455                      460  
Ala Lys Lys Met Thr Val Leu Tyr Lys Leu Ala Arg Glu Gln Leu Ser  
465                      470                      475                      480  
Lys Gln Tyr His Tyr Asp Phe Gly Leu Arg Ala Leu Lys Ser Val Leu  
                         485                      490                      495  
Val Met Ala Gly Glu Leu Lys Arg Gly Ser Ser Asp Leu Arg Glu Asp  
                         500                      505                      510  
Val Val Leu Met Arg Ala Leu Arg Asp Met Asn Leu Pro Lys Phe Val  
                         515                      520                      525  
Leu Glu Asp Val Pro Leu Phe Leu Gly Leu Ile Ser Asp Leu Phe Pro  
                         530                      535                      540

Gly Leu Asp Cys Pro Arg Val Arg Tyr Pro Asp Phe Asn Asp Ala Val  
 545                      550                      555                      560  
 Glu Gln Val Leu Glu Glu Asn Gly Tyr Ala Val Leu Pro Ile Gln Val  
                          565                      570                      575  
 Asp Lys Val Val Gln Met Phe Glu Thr Met Leu Thr Arg His Thr Thr  
                          580                      585                      590  
 Met Val Val Gly Pro Thr Arg Gly Gly Lys Ser Val Val Ile Asn Thr  
                          595                      600                      605  
 Leu Cys Gln Ala Gln Thr Asn Leu Ser  
                          610                      615

<210> 3714

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3714

Met Gln Phe Ser Lys Pro Arg Lys Leu Val Asn Thr Ile Asn Pro Gly  
   1                      5                      10                      15  
 Ala Arg Phe Met Thr Thr Ala Met Tyr Asp Ala Arg Glu Ala Ile Ile  
                          20                      25                      30  
 Pro Gly Ser Val Tyr Asp Arg Ser Ser Gln Gly Arg Pro Ser Ser Met  
                          35                      40                      45  
 Tyr Phe Gln Thr His Asp Gln Ile Gly Met Ile Ser Ala Gly Pro Ser  
                          50                      55                      60  
 His Val Ala Ala Met Asn Ile Pro Ile Pro Phe Asn Leu Val Met Pro  
                          65                      70                      75                      80  
 Pro Met Pro Pro Pro Gly Tyr Phe Gly Gln Ala Asn Gly Pro Ala Ala

	85	90	95
Gly Glu His Leu Trp Leu Arg Leu Gly Val Ala Leu Leu Arg Ala Leu			
100	105	110	
Glu Gly Val Leu Val Cys Glu Ala Leu Ala Ser Phe Gly Ser Pro Trp			
115	120	125	
Thr Ala Val Phe Gln Gly Glu Ala Pro Arg Lys Ala Arg Leu Val Val			
130	135	140	
Gly Asp Ala Arg Arg Thr Ala Leu Gly Phe Leu Asp Pro Ala Arg Leu			
145	150	155	160
Thr Ser Pro Thr Ala Lys Pro Ala Arg Met Trp Arg His Ser Pro Ser			
165	170	175	
Leu Arg Ala Pro			
180			

&lt;210&gt; 3715

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3715

Met Pro Pro Cys Ile Gln Pro Arg Lys Tyr Trp Thr Leu Gln Arg Pro			
1	5	10	15
Val Cys Ser Val Asn Leu Ala Pro Ser Gly Pro Pro Glu Thr His Arg			
20	25	30	
Val Ser Arg Ala Val Gly Met Pro Leu Ser Leu Thr His Pro Thr Leu			
35	40	45	
Phe Gln Ala Arg His Pro Ser Leu Phe Leu Thr Leu Asp Tyr Val Leu			
50	55	60	

<210> 3716

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3716

出証特 2 0 0 4 - 3 0 5 9 6 6 0

115                      120                      125  
 His Trp His Thr Trp Cys Leu Tyr Phe His  
 130                      135

<210> 3717

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3717

Met Leu His Gln Ser Gly Lys Phe Leu Ile Pro Asp Ile Lys Glu Glu  
 1                      5                      10                      15  
 Glu Lys Ser Tyr Gln Val Ile Arg Trp Phe Ser Pro Glu Asp His Gln  
 20                      25                      30  
 Lys Arg Ile Lys Lys His Phe Asp Ser Tyr Ile Glu Thr Ala Leu Asp  
 35                      40                      45  
 Gly Arg Lys Glu Ser Glu Ala Leu Val Lys Leu Met Glu Ile Phe Gly  
 50                      55                      60  
 Thr Gln Cys Ser Tyr Leu Leu Ser Arg Lys Asp Ile Met Asp Ser Leu  
 65                      70                      75                      80  
 Lys Asn Glu Asn Tyr Asp Leu Val Phe Val Glu Ala Phe Asp Phe Cys  
 85                      90                      95  
 Ser Phe Leu Ile Ala Glu Lys Leu Val Lys Pro Phe Val Ala Ile Leu  
 100                      105                      110  
 Pro Thr Thr Phe Gly Ser Leu Asp Phe Gly Leu Pro Ser Pro Leu Ser  
 115                      120                      125  
 Tyr Val Pro Val Phe Pro Ser Leu Leu Thr Asp His Met Asp Phe Trp  
 130                      135                      140

Gly Arg Val Lys Asn Phe Leu Met Phe Phe Ser Phe Ser Arg Ser Gln  
 145                      150                      155                      160  
 Trp Asp Met Gln Ser Thr Phe Asp Asn Thr Ile Lys Glu His Phe Pro  
                          165                      170                      175  
 Glu Gly Ser Arg Pro Val Leu Ser His Leu Leu Leu Lys Ala Glu Leu  
                          180                      185                      190  
 Trp Phe Val Asn Ser Asp Phe Ala Phe Asp Phe Ala Arg Pro Leu Leu  
                          195                      200                      205  
 Pro Asn Thr Val Tyr Ile Gly Gly Leu Met Glu Lys Pro Ile Lys Pro  
                          210                      215                      220  
 Val Pro Gln Asn Gly Gln Pro Ala Leu Phe Thr Thr Pro Ser Leu Phe  
 225                      230                      235                      240  
 Ser Ser Gly Val Tyr Pro Glu Pro Leu Arg Trp Leu  
                          245                      250

<210> 3718

<211> 392

<212> PRT

<213> Homo sapiens

<400> 3718

Met Gln Ser Gly Gly Ser Leu Pro Phe Cys Cys Tyr Leu Pro Ser Val  
 1                      5                      10                      15  
 Ser Ser Gln Leu Leu Leu Arg Glu Ser Tyr Cys Asn Phe Ile Lys Arg  
                          20                      25                      30  
 Thr Gln Cys Lys Ser Ser Lys Leu Met Phe Ser Arg Asp Phe Leu Ser  
                          35                      40                      45  
 Gly Gln Lys Tyr Cys Arg Cys Leu Leu Trp Ala Leu Pro Asp His Pro

50	55	60
Arg Arg Arg Gly Pro Thr Ser Ala Asn Ala Leu Pro Leu Ser Ala Glu		
65	70	75
Leu Val Met Leu Leu Glu Trp Trp Ser Cys Thr Glu Cys Thr Leu Phe		
85	90	95
Thr Asp Gln Ala Thr Val Glu Arg Phe Gly Lys Glu His Ala Val Ile		
100	105	110
Ile Leu Asn His Asn Phe Glu Ile Asp Phe Leu Cys Gly Trp Thr Met		
115	120	125
Cys Glu Arg Phe Gly Val Leu Gly Ser Ser Lys Val Leu Ala Lys Lys		
130	135	140
Glu Leu Leu Tyr Val Pro Leu Ile Gly Trp Thr Trp Tyr Phe Leu Glu		
145	150	155
Ile Val Phe Cys Lys Arg Lys Trp Glu Glu Asp Arg Asp Thr Val Val		
165	170	175
Glu Gly Leu Arg Arg Leu Ser Asp Tyr Pro Glu Tyr Met Trp Phe Leu		
180	185	190
Leu Tyr Cys Glu Gly Thr Arg Phe Thr Glu Thr Lys His Arg Val Ser		
195	200	205
Met Glu Val Ala Ala Ala Lys Gly Leu Pro Val Leu Lys Tyr His Leu		
210	215	220
Leu Pro Arg Thr Lys Gly Phe Thr Thr Ala Val Lys Cys Leu Arg Gly		
225	230	235
Thr Val Ala Ala Val Tyr Asp Val Thr Leu Asn Phe Arg Gly Asn Lys		
245	250	255
Asn Pro Ser Leu Leu Gly Ile Leu Tyr Gly Lys Lys Tyr Glu Ala Asp		
260	265	270
Met Cys Val Arg Arg Phe Pro Leu Glu Asp Ile Pro Leu Asp Glu Lys		
275	280	285



Glu Ala Ala Gln Trp Leu His Lys Leu Tyr Gln Glu Lys Asp Ala Leu  
 290 295 300  
 Gln Glu Ile Tyr Asn Gln Lys Gly Met Phe Pro Gly Glu Gln Phe Lys  
 305 310 315 320  
 Pro Ala Arg Arg Pro Trp Thr Leu Leu Asn Phe Leu Ser Trp Ala Thr  
 325 330 335  
 Ile Leu Leu Ser Pro Leu Phe Ser Phe Val Leu Gly Val Phe Ala Ser  
 340 345 350  
 Gly Ser Pro Leu Leu Ile Leu Thr Phe Leu Gly Phe Val Gly Ala Ala  
 355 360 365  
 Ser Phe Gly Val Arg Arg Leu Ile Gly Val Thr Glu Ile Glu Lys Gly  
 370 375 380  
 Ser Ser Tyr Gly Asn Gln Glu Phe  
 385 390

&lt;210&gt; 3719

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3719

Met Asn Tyr Leu Phe Leu Gly Gly Cys Leu His Glu Pro Val Ser His  
 1 5 10 15  
 Lys Phe Val Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Arg Arg  
 20 25 30  
 Thr Phe Ala Leu Val Ala Gln Ala Gly Val Gln Trp Arg Asn Leu Gly  
 35 40 45  
 Ser Pro Gln Pro Pro Pro Pro Arg Phe Lys Gln Phe Ser Arg Leu Ser

50                      55                      60  
 Leu Pro Ser Ser Trp Asp Tyr Arg His Ala Pro Ser Arg Leu Ala Asn  
 65                      70                      75                      80  
 Phe Phe Phe Phe Phe Val Phe Leu Val Glu Met Gly Phe Leu His Val  
                     85                      90                      95  
 Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser  
                     100                      105                      110  
 Ala Cys Gln Ser Ala Gly Ile Thr Ser Val Ser His His Ala Gln Pro  
                     115                      120                      125  
 Ile Ser Leu Phe Ser Lys Lys Lys Gly Gly Arg Phe Leu Lys Ile Phe  
                     130                      135                      140  
 Ser Ala Phe Ala  
 145

&lt;210&gt; 3720

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3720

Met Glu Ala Glu Ala Trp Gly Ser Gln Ala Arg Ala Gly Leu Gly Ala  
 1                      5                      10                      15  
 Ala Glu Asn Cys Leu Glu Gly Gly Asn Gln Ala Phe Leu Leu Glu Arg  
                     20                      25                      30  
 Val Thr Gly Thr Lys Gly Arg Gly Gln Gly Gln Pro Leu Glu Arg Ala  
                     35                      40                      45  
 Gly Glu Glu Gly Glu Ala Gly Gly Asp Pro Arg Arg Asp Pro Gly Glu  
                     50                      55                      60

Val Val Ala Lys Ser Arg Val Arg Ala Arg Pro His Leu Ser Leu Tyr  
 65 70 75 80  
 Pro Ala Leu Pro Gly Val Ala Leu Ala Leu Leu Cys Cys Pro Leu Gln  
 85 90 95  
 Asp Arg Cys Leu Arg Leu Val Pro Ala Cys Pro Thr Ala Gly Pro Gln  
 100 105 110  
 His Pro Gln Val Leu Pro Trp Ala Leu Gln Lys Gln Gly Val Val Arg  
 115 120 125  
 Ser Gly Pro Trp Ala Thr Glu Glu Met Val Trp Gly Thr Arg Thr Gly  
 130 135 140  
 Val Gly Gly Leu Thr Ala Val Phe  
 145 150

&lt;210&gt; 3721

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3721

Met Asn Leu Pro His Cys Ser Gly Asn Ser Arg Gly Arg Pro Pro Pro  
 1 5 10 15  
 Gly Pro Ala Met Arg Arg Asp Gly Gln Ala Gly Pro Ala Leu Gly Gly  
 20 25 30  
 Gly Arg Pro Pro Pro His Thr Tyr Leu Glu Arg Pro Glu Ala Gln Leu  
 35 40 45  
 Lys Gln Tyr Leu Val Phe Gly Gly Asp Ala Asp Gly Lys His Gly Lys  
 50 55 60  
 His His Val Val Asp Ala Glu Gln Arg Asp Lys Gln Glu Arg Gly Leu

65                      70                      75                      80  
 Gly Gln Pro Pro Ala Gln Lys Glu Met Ser Gln Leu Ser Cys Trp Thr  
                                  85                      90                      95  
 Leu Gly Pro Ser Ala Ser Leu Ala Gly Ser Phe Ser Gly Gly Gly Ser  
                                  100                      105                      110  
 Trp Val Trp Glu Gly Leu His Thr Ser Ser Pro Leu Leu Glu Ser Pro  
                                  115                      120                      125  
 Pro Asn Lys Lys Asn His Cys Phe Phe Thr Phe Met Ser Glu Ala Pro  
                                  130                      135                      140  
 Val His Ile  
 145

<210> 3722

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3722

Met Asp Asn Pro Leu Leu Lys Tyr Ser Ala Lys Asp Tyr Phe Phe Lys  
   1                      5                      10                      15  
 Ala Ala Leu Cys His Phe Ile Val Asp Glu Leu Asn Ala Lys Leu Ala  
                                  20                      25                      30  
 Leu Glu Lys Tyr Glu Glu Met Phe Pro Ala Phe Thr Asp Ser Arg Glu  
                                  35                      40                      45  
 Cys Lys Leu Leu Lys Lys Leu Leu Glu Ala His Glu Glu Gln Asn Ser  
                                  50                      55                      60  
 Glu Ala Tyr Thr Glu Ala Val Lys Glu Phe Asp Ser Ile Ser Arg Leu  
   65                      70                      75                      80

Asp Gln Trp Leu Thr Thr Met Leu Leu Arg Ile Lys Lys Ser Ile Gln  
                             85                            90                            95  
 Gly Asp Gly Glu Gly Asp Gly Asp Leu Lys  
                             100                            105

<210> 3723

<211> 532

<212> PRT

<213> Homo sapiens

<400> 3723

Met Ser Ile His Leu Arg Glu Asp Ser Ser Gln Thr His Val Leu Met  
     1                    5                    10                    15  
 Met Lys Gly Ala Pro Glu Arg Ile Leu Glu Phe Cys Ser Thr Phe Leu  
                     20                    25                    30  
 Leu Asn Gly Gln Glu Tyr Ser Met Asn Asp Glu Met Lys Glu Ala Phe  
                     35                    40                    45  
 Gln Asn Ala Tyr Leu Glu Leu Gly Gly Leu Gly Glu Arg Val Leu Gly  
                     50                    55                    60  
 Phe Cys Phe Leu Asn Leu Pro Ser Ser Phe Ser Lys Gly Phe Pro Phe  
     65                    70                    75                    80  
 Asn Thr Asp Glu Ile Asn Phe Pro Met Asp Asn Leu Cys Phe Val Gly  
                     85                    90                    95  
 Leu Ile Ser Met Ile Asp Pro Pro Arg Ala Ala Val Pro Asp Ala Val  
                     100                    105                    110  
 Ser Lys Cys Arg Ser Ala Gly Ile Lys Val Ile Met Val Thr Gly Asp  
                     115                    120                    125  
 His Pro Ile Thr Ala Lys Ala Ile Ala Lys Gly Val Gly Ile Ile Ser

130	135	140	
Glu Gly Thr Glu Thr Ala Glu Glu Val Ala Ala Arg Leu Lys Ile Pro			
145	150	155	160
Ile Ser Lys Val Asp Ala Ser Ala Ala Lys Ala Ile Val Val His Gly			
165	170	175	
Ala Glu Leu Lys Asp Ile Gln Ser Lys Gln Leu Asp Gln Ile Leu Gln			
180	185	190	
Asn His Pro Glu Ile Val Phe Ala Arg Thr Ser Pro Gln Gln Lys Leu			
195	200	205	
Ile Ile Val Glu Gly Cys Gln Arg Leu Gly Ala Val Val Ala Val Thr			
210	215	220	
Gly Asp Gly Val Asn Asp Ser Pro Ala Leu Lys Lys Ala Asp Ile Gly			
225	230	235	240
Ile Ala Met Gly Ile Ser Gly Ser Asp Val Ser Lys Gln Ala Ala Asp			
245	250	255	
Met Ile Leu Leu Asp Asp Asn Phe Ala Ser Ile Val Thr Gly Val Glu			
260	265	270	
Glu Gly Arg Leu Ile Phe Asp Asn Leu Lys Lys Ser Ile Met Tyr Thr			
275	280	285	
Leu Thr Ser Asn Ile Pro Glu Ile Thr Pro Phe Leu Met Phe Ile Ile			
290	295	300	
Leu Gly Ile Pro Leu Pro Leu Gly Thr Ile Thr Ile Leu Cys Ile Asp			
305	310	315	320
Leu Gly Thr Asp Met Val Pro Ala Ile Ser Leu Ala Tyr Glu Ser Ala			
325	330	335	
Glu Ser Asp Ile Met Lys Arg Leu Pro Arg Asn Pro Lys Thr Asp Asn			
340	345	350	
Leu Val Asn His Arg Leu Ile Gly Met Ala Tyr Gly Gln Ile Gly Met			
355	360	365	

Ile Gln Ala Leu Ala Gly Phe Phe Thr Tyr Phe Val Ile Leu Ala Glu  
370 375 380

Asn Gly Phe Arg Pro Val Asp Leu Leu Gly Ile Arg Leu His Trp Glu  
385 390 395 400

Asp Lys Tyr Leu Asn Asp Leu Glu Asp Ser Tyr Gly Gln Gln Trp Thr  
405 410 415

Tyr Glu Gln Arg Lys Val Val Glu Phe Thr Cys Gln Thr Ala Phe Phe  
420 425 430

Val Thr Ile Val Val Val Gln Trp Ala Asp Leu Ile Ile Ser Lys Thr  
435 440 445

Arg Arg Asn Ser Leu Phe Gln Gln Gly Met Arg Asn Lys Val Leu Ile  
450 455 460

Phe Gly Ile Leu Glu Glu Thr Leu Leu Ala Ala Phe Leu Ser Tyr Thr  
465 470 475 480

Pro Gly Met Asp Val Ala Leu Arg Met Tyr Pro Leu Lys Ile Thr Trp  
485 490 495

Trp Leu Cys Ala Ile Pro Tyr Ser Ile Leu Ile Phe Val Tyr Asp Glu  
500 505 510

Ile Arg Lys Leu Leu Ile Arg Gln His Pro Asp Gly Trp Val Glu Arg  
515 520 525

Glu Thr Tyr Tyr  
530

<210> 3724

<211> 1139

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3724

Met	Ala	Gly	Ile	Ile	Lys	Lys	Gln	Ile	Leu	Lys	His	Leu	Ser	Arg	Phe
1				5					10					15	
Thr	Lys	Asn	Leu	Ser	Pro	Asp	Lys	Ile	Asn	Leu	Ser	Thr	Leu	Lys	Gly
			20					25					30		
Glu	Gly	Glu	Leu	Lys	Asn	Leu	Glu	Leu	Asp	Glu	Glu	Val	Leu	Gln	Asn
		35					40					45			
Met	Leu	Asp	Leu	Pro	Thr	Trp	Leu	Ala	Ile	Asn	Lys	Val	Phe	Cys	Asn
	50					55						60			
Lys	Ala	Ser	Ile	Arg	Ile	Pro	Trp	Thr	Lys	Leu	Lys	Thr	His	Pro	Ile
65					70					75				80	
Cys	Leu	Ser	Leu	Asp	Lys	Val	Ile	Met	Glu	Met	Ser	Thr	Cys	Glu	Glu
				85					90				95		
Pro	Arg	Ser	Pro	Asn	Gly	Pro	Ser	Pro	Ile	Ala	Thr	Ala	Ser	Gly	Gln
			100					105					110		
Ser	Glu	Tyr	Gly	Phe	Ala	Glu	Lys	Val	Val	Glu	Gly	Ile	Ser	Val	Ser
		115					120					125			
Val	Asn	Ser	Ile	Val	Ile	Arg	Ile	Gly	Ala	Lys	Ala	Phe	Asn	Ala	Ser
	130					135					140				
Phe	Glu	Leu	Ser	Gln	Leu	Arg	Ile	Tyr	Ser	Val	Asn	Ala	His	Trp	Glu
145					150					155				160	
His	Gly	Asp	Leu	Arg	Phe	Thr	Arg	Ile	Gln	Asp	Pro	Gln	Arg	Gly	Glu
				165					170				175		
Val	Leu	Thr	Phe	Lys	Glu	Ile	Asn	Trp	Gln	Met	Ile	Arg	Ile	Glu	Ala
		180						185				190			
Asp	Ala	Thr	Gln	Ser	Ser	His	Leu	Glu	Ile	Met	Cys	Ala	Pro	Val	Arg
		195					200					205			
Leu	Ile	Thr	Asn	Gln	Ser	Lys	Ile	Arg	Val	Thr	Leu	Lys	Arg	Met	Leu
	210						215					220			



Lys Asp Cys Asn Val Ile Ala Thr Lys Leu Val Leu Ile Leu Asp Asp  
225 230 235 240  
Leu Leu Trp Val Leu Thr Asp Pro Gln Leu Lys Ala Met Val Gln Tyr  
245 250 255  
Ala Lys Ser Leu Ser Glu Ala Ile Glu Lys Ser Thr Glu Gln Arg Lys  
260 265 270  
Ser Met Ala Pro Glu Pro Thr Gln Ser Ser Thr Val Val Ala Ser Ala  
275 280 285  
Gln Gln Val Lys Thr Thr Gln Thr Ser Asn Ala Pro Asp Val Asn Asp  
290 295 300  
Ala Ile Val Lys Leu Phe Asn Asp Phe Asp Val Lys Glu Thr Ser His  
305 310 315 320  
His Leu Val Ile Ser His Leu Asp Leu His Ile Cys Asp Asp Ile His  
325 330 335  
Ala Lys Glu Lys Glu Ser Asn Arg Arg Ile Thr Gly Gly Ala Met Gln  
340 345 350  
Leu Ser Phe Thr Gln Leu Thr Ile Asp Tyr Tyr Pro Tyr His Lys Ala  
355 360 365  
Gly Asp Ser Cys Asn His Trp Met Tyr Phe Ser Asp Ala Thr Lys Thr  
370 375 380  
Lys Asn Gly Trp Ala Asn Glu Leu Leu His Glu Phe Glu Cys Asn Val  
385 390 395 400  
Glu Met Leu Lys Gln Ala Val Lys Asp His Asn Val Gly Ser Pro Pro  
405 410 415  
Lys Ser Pro Thr His Ala Ser Pro Gln His Thr Gln Thr Glu Lys Asp  
420 425 430  
Tyr Pro Leu Lys Gly Thr Cys Arg Thr Pro Ser Val Leu Ser Gln Gln  
435 440 445  
Ser Lys Ala Lys Leu Met Ser Ser Ser Val Val Val Arg Leu Ala Asp

450                      455                      460  
Phe Asn Ile Tyr Gln Val Ser Thr Ala Glu Gln Cys Arg Ser Ser Pro  
465                      470                      475                      480  
Lys Ser Met Ile Cys Cys Asn Lys Lys Ser Leu Tyr Leu Pro Gln Glu  
                    485                      490                      495  
Met Ser Ala Val Tyr Ile Glu Phe Thr Glu Tyr Tyr Tyr Pro Asp Gly  
                    500                      505                      510  
Lys Asp Phe Pro Ile Pro Ser Pro Asn Leu Tyr Ser Gln Leu Asn Ala  
                    515                      520                      525  
Leu Gln Phe Thr Val Asp Glu Arg Ser Ile Leu Trp Leu Asn Gln Phe  
                    530                      535                      540  
Leu Leu Asp Leu Lys Gln Ser Leu Asn Gln Phe Met Ala Val Tyr Lys  
545                      550                      555                      560  
Leu Asn Asp Asn Ser Lys Ser Asp Glu His Val Asp Val Arg Val Asp  
                    565                      570                      575  
Gly Leu Met Leu Lys Phe Val Ile Pro Ser Glu Val Lys Ser Glu Cys  
                    580                      585                      590  
His Gln Asp Gln Pro Arg Ala Ile Ser Ile Gln Ser Ser Glu Met Ile  
                    595                      600                      605  
Ala Thr Asn Thr Arg His Cys Pro Asn Cys Arg His Ser Asp Leu Glu  
                    610                      615                      620  
Ala Leu Phe Gln Asp Phe Lys Asp Cys Asp Phe Phe Ser Lys Thr Tyr  
625                      630                      635                      640  
Thr Ser Phe Pro Lys Ser Cys Asp Asn Phe Asn Leu Leu His Pro Ile  
                    645                      650                      655  
Phe Gln Arg His Ala His Glu Gln Asp Thr Lys Met His Glu Ile Tyr  
                    660                      665                      670  
Lys Gly Asn Ile Thr Pro Gln Leu Asn Lys Asn Thr Leu Lys Thr Ser  
                    675                      680                      685

Ala Ala Thr Asp Val Trp Ala Val Tyr Phe Ser Gln Phe Trp Ile Asp  
690 695 700  
Tyr Glu Gly Met Lys Ser Gly Lys Gly Arg Pro Ile Ser Phe Val Asp  
705 710 715 720  
Ser Phe Pro Leu Ser Ile Trp Ile Cys Gln Pro Thr Arg Tyr Ala Glu  
725 730 735  
Ser Gln Lys Glu Pro Gln Thr Cys Asn Gln Val Ser Leu Asn Thr Ser  
740 745 750  
Gln Ser Glu Ser Ser Asp Leu Ala Gly Arg Leu Lys Arg Lys Lys Leu  
755 760 765  
Leu Lys Glu Tyr Tyr Ser Thr Glu Ser Glu Pro Leu Thr Asn Gly Gly  
770 775 780  
Gln Lys Pro Ser Ser Ser Asp Thr Phe Phe Arg Phe Ser Pro Ser Ser  
785 790 795 800  
Ser Glu Ala Asp Ile His Leu Leu Val His Val His Lys His Val Ser  
805 810 815  
Met Gln Ile Asn His Tyr Gln Tyr Leu Leu Leu Leu Phe Leu His Glu  
820 825 830  
Ser Leu Ile Leu Leu Ser Glu Asn Leu Arg Lys Asp Val Glu Ala Val  
835 840 845  
Thr Gly Ser Pro Ala Ser Gln Thr Ser Ile Cys Ile Gly Ile Leu Leu  
850 855 860  
Arg Ser Ala Glu Leu Ala Leu Leu Leu His Pro Val Asp Gln Ala Asn  
865 870 875 880  
Thr Leu Lys Ser Pro Val Ser Glu Ser Val Ser Pro Val Val Pro Asp  
885 890 895  
Tyr Leu Pro Thr Glu Asn Gly Asp Phe Leu Ser Ser Lys Arg Lys Gln  
900 905 910  
Ile Ser Arg Asp Ile Asn Arg Ile Arg Ser Val Thr Val Asn His Met

915 920 925  
Ser Asp Asn Arg Ser Met Ser Val Asp Leu Ser His Ile Pro Leu Lys  
930 935 940  
Asp Pro Leu Leu Phe Lys Ser Ala Ser Asp Thr Asn Leu Gln Lys Gly  
945 950 955 960  
Ile Ser Phe Met Asp Tyr Leu Ser Asp Lys His Leu Gly Lys Ile Ser  
965 970 975  
Glu Asp Glu Ser Ser Gly Leu Val Tyr Lys Ser Gly Ser Gly Glu Ile  
980 985 990  
Gly Ser Glu Thr Ser Asp Lys Lys Asp Ser Phe Tyr Thr Asp Ser Ser  
995 1000 1005  
Ser Ile Leu Asn Tyr Arg Glu Asp Ser Asn Ile Leu Ser Phe Asp Ser  
1010 1015 1020  
Asp Gly Asn Gln Asn Ile Leu Ser Ser Thr Leu Thr Ser Lys Gly Asn  
1025 1030 1035 1040  
Glu Thr Ile Glu Ser Ile Phe Lys Ala Glu Asp Leu Leu Pro Glu Ala  
1045 1050 1055  
Ala Ser Leu Ser Glu Asn Leu Asp Ile Ser Lys Glu Glu Thr Pro Pro  
1060 1065 1070  
Val Arg Thr Leu Lys Ser Gln Ser Ser Leu Ser Gly Lys Pro Lys Glu  
1075 1080 1085  
Arg Cys Pro Pro Asn Leu Ala Pro Leu Cys Val Ser Tyr Lys Asn Met  
1090 1095 1100  
Lys Arg Ser Ser Ser Gln Met Ser Leu Asp Thr Ile Ser Leu Asp Ser  
1105 1110 1115 1120  
Met Ile Leu Glu Glu Gln Leu Leu Glu Ser Asp Gly Ser Asp Ser His  
1125 1130 1135  
Met Phe Leu

&lt;210&gt; 3725

&lt;211&gt; 317

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3725

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Met Ser Pro Ser Val Thr Ala Gln Pro Leu Asp Leu Gly Leu Thr Ile
  1             5             10             15
Thr Pro Glu Pro Thr Thr Glu Val Glu His Ser Thr Pro Leu Lys Lys
             20             25             30
Ile Pro Pro Lys His Pro Lys Val Thr Leu Pro His Pro Asp Gln Val
             35             40             45
Gln Thr Leu His Ser Asn Leu Thr Gln Val Thr Val Gln Pro Leu Asp
             50             55             60
Leu Glu Leu Thr Leu Thr Pro Glu Ser Thr Met Glu Val Glu Pro Phe
             65             70             75             80
Pro Thr Met Gln Lys Thr Pro Thr Gln Pro Pro Glu Leu Arg Lys Glu
             85             90             95
Val Val Ala Gln Pro Pro Val Tyr Tyr Glu Thr Ser Met Pro Thr Arg
             100            105            110
Gly Gln Asp Gln Ala Gln His Pro Thr Ser Pro Arg Val Thr Val Gln
             115            120            125
Pro Leu Asp Leu Gly Leu Thr Ile Thr Pro Glu Ser Ile Thr Lys Val
             130            135            140
Glu Pro Ser Thr Ala Leu Met Thr Thr Ala Pro Pro Pro Glu His Leu
             145            150            155            160
Glu Val Thr Leu Pro Pro Pro Asp Lys Gly Gln Ala Gln His Ser Asn

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出証特 2 0 0 4 - 3 0 5 9 6 6 0

Phe Phe Phe Pro Phe Leu Leu Ser Pro Phe Leu Phe Leu Leu Pro Leu  
                     20                            25                            30  
 Pro Leu Ser Leu Phe Pro Phe Leu Phe Pro Phe Pro Leu Ser Ser Phe  
                     35                            40                            45  
 Ser Ser Phe Pro Ser Leu Pro Phe Pro Phe Phe Phe Ser Phe Pro Phe  
                     50                            55                            60  
 Pro Phe Asp Lys Val Pro Arg Leu Asp Ala Ile Thr Ala His Cys Asp  
                     65                            70                            75                            80  
 Leu His Leu Leu Gly Cys Ser Asn Pro Pro Thr Leu Ala Ser Gly Val  
                                     85                            90                            95  
 Ala Gly Ile Thr Gly Ala Asp His His Thr Trp Leu Ile Phe Val Phe  
                     100                            105                            110  
 Phe Val Glu Leu Gly Phe Gln Pro Cys Cys Pro Gly Trp Ser Gln Thr  
                     115                            120                            125  
 Pro Glu Leu Lys Arg Ser His Pro Pro Trp Pro Pro Lys Val Leu Gly  
                     130                            135                            140  
 Leu Gln Ala  
 145

&lt;210&gt; 3727

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3727

Met Phe Leu Phe His Ser Gly Leu Cys Ser Asp Phe Thr Ser Ser Gln  
           1                            5                            10                            15  
 Gly Pro Leu Leu Gly Pro Ser Leu Asp Trp Pro Leu Cys His Ser Arg

	20		25		30
Ser	Leu	Pro	Val	Leu	Tyr
Pro	Ala	Leu	His	Leu	Met
Ser	His	Asn	Ser		
	35		40		45
Phe	Phe	Phe	Phe	Phe	Glu
Thr	Glu	Ser	His	Ser	Val
Ser	Arg	Leu	Glu		
	50		55		60
Cys	Asn	Gly	Ala	Ile	Ser
Ala	His	Cys	Asn	Leu	Cys
Leu	Pro	Gly	Ser		
	65		70		75
Ser	Asp	Ser	Pro	Ala	Ser
Ala	Ser	Gln	Val	Ala	Gly
Thr	Thr	Gly	Val		
	85		90		95
Cys	His	His	Ala	Gln	Leu
Ile	Leu	Phe	Val	Phe	Leu
Val	Lys	Thr	Gly		
	100		105		110
Phe	Cys	His	Val	Gly	Gln
Ala	Arg	Leu	Glu	Leu	Leu
Thr	Ser	Ser	Asp		
	115		120		125
Pro	Pro	Thr	Ser	Ala	Ser
Gln	Ser	Ala	Gly	Ile	Thr
Gly	Val	Ser	His		
	130		135		140
Arg	Thr	Arg	Pro	Cys	Gly
His	Ile	Thr	Leu	Tyr	Val
Pro	Leu	Ser	Leu		
	145		150		155
Pro	Arg	Leu	Leu	Ala	Ser
					165

&lt;210&gt; 3728

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3728

Met	Asn	Asn	Ser	Leu	Asp	Tyr	Leu	Ala	Tyr	Pro	Val	Ile	Val	Ser	Asn
1			5						10					15	



His Arg Gln Ser Thr Thr Phe Arg Lys Lys Leu Asp Phe Gly His Tyr  
                   20                                  25                                  30  
 Val Ser His Lys Asn Arg Ile Gln Ile Ala Lys Pro Thr Val Asp Thr  
                   35                                  40                                  45  
 Lys Pro Pro Val Ala His Thr Asn His Ile Leu Lys Leu Ser Lys Leu  
                   50                                  55                                  60  
 Gln Gly Glu Gln Lys Lys Ile Asn Lys Ile Glu Tyr Glu Asn Lys Gln  
                   65                                  70                                  75                                  80  
 Leu Cys Gln Lys Ile Ala Asn Ala His Arg Gly Pro Ala Lys Val Asp  
                                   85                                  90                                  95  
 Cys Trp Asn Glu Tyr Phe Ser Lys Ser Leu Asn Arg Glu Thr Arg Asn  
                   100                                  105                                  110  
 Arg Glu Leu Val Arg Ile Thr Met Glu Asn Gln Gly Ile Leu Lys Arg  
                   115                                  120                                  125  
 Leu Val Asp Arg Lys Pro His Tyr Asp Arg Arg Ala Ser Glu Ile Asp  
                   130                                  135                                  140  
 Trp Gln Asn Ser Arg Arg Tyr Ile Arg Asn Thr Thr Arg Tyr Leu Leu  
                   145                                  150                                  155                                  160  
 Ser Gln Asn Glu

&lt;210&gt; 3729

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3729

Met Ser His His Ala Lys Pro Lys Pro Gly Val Gln Trp Cys Lys Phe

1	5	10	15
Gln Ser Glu Ser Thr Gly Arg Arg Ala Arg Ser Ala Asp Val Gln Gly			
20	25	30	
Gln Glu Lys Met Asp Val Thr Ala Gln Glu Ala Arg Thr Asn Leu Pro			
35	40	45	
Phe Tyr Leu Phe Val Leu Phe Ser Pro Gly Ser Leu Gly Gln Glu Ala			
50	55	60	
Ala Ala Val Lys Gln Ser His Ile Ser Ala Pro Ala Ser Glu Leu Arg			
65	70	75	80
Cys Ile Gln Leu Arg Ser Arg Ser Arg Thr Arg Gly Asn Lys Ile Ile			
85	90	95	
Trp Glu Gln Gly Gln Glu Gly Ala Gly Leu His Gly Arg			
100	105		

&lt;210&gt; 3730

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3730

Met Asp Pro Ala Ser Val His Pro Pro Lys Leu Cys Pro Pro Pro Phe			
1	5	10	15
Ile Phe Ile Phe Ile Phe Ile Phe Met Phe Leu Ser Ile Thr Ser Arg			
20	25	30	
Arg Arg Pro Arg Lys Ala Lys Tyr Leu Asp Glu Met Leu Ser Ser Leu			
35	40	45	
Pro Val Arg Leu Gln Pro Asp Ser Asn Ala Ser Ser Arg Val Val Leu			
50	55	60	

出証特 2 0 0 4 - 3 0 5 9 6 6 0

出証特 2 0 0 4 - 3 0 5 9 6 6 0

<210> 3732

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3732

Met Cys Leu Thr Ile Gln Gly Ala Ile Trp Val Arg Thr Gln Ser Gln

1 5 10 15

Thr Ile Ser Leu Ala Asn Glu Glu Thr Glu Ser Glu Arg Ser Ser Asp

20 25 30

Val Pro Lys Ser Ala Arg Pro Val Ser Gly Arg Ala Thr Leu Leu Glu

35 40 45

Glu Asp Ser Pro Ala Pro His Pro Pro Cys Phe Ser Met Tyr Tyr Val

50 55 60

Pro Ala Ser Leu Phe Ala Ala Pro Leu Glu Cys Phe Ser Met Gln Leu

65 70 75 80

Ser Leu Gln Ser Val Val Pro Ala His Gly Leu Pro Ser Ser Ser Arg

85 90 95

Arg Gln Asn Arg Gly Lys Pro

100

<210> 3733

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3733

Met Arg Val Met Leu Thr Phe Phe Ile Pro Lys Pro Ile Arg Ile Arg

1	5	10	15												
Phe	Ala	Asn	Ser	Ser	Gly	Lys	Asn	Gly	Arg	Lys	Gly	Ser	Pro	Leu	Lys
	20		25		30										
Ser	Arg	Leu	Phe	Tyr	Cys	Phe	Ser	Asn	Ile	Lys	Asn	Lys	Gln	Leu	Gly
	35		40		45										
Glu	Val	Phe	Leu	Phe	Leu	Phe	Leu	Phe	Val	Phe	Gly	Leu	Gly	Ser	Val
	50		55		60										
Gly	Gly	Arg	Gly	Leu	Ser	Lys	Trp	Cys	Ala	Arg	Lys	Ile	Asn	Thr	Gln
	65		70		75										80
Leu	Thr	Tyr	Lys	His	Glu	Gly	Leu	Tyr	Gln	Gln	Lys	Phe	Lys	Val	Pro
			85		90									95	
Arg	Phe	Phe	Leu	Ile	Phe	Phe	Cys	Leu							
	100		105												

&lt;210&gt; 3734

&lt;211&gt; 620

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3734

Met	Lys	Thr	Arg	Pro	Ser	Ser	Leu	Glu	Ser	Val	Thr	Cys	Trp	Arg	Ala
1	5	10	15												
Lys	Phe	Met	Glu	Ala	Phe	Phe	Ser	His	Val	Leu	Arg	Gly	Thr	Ile	Asp
	20		25		30										
Val	Ser	Ser	Asp	Arg	Arg	Leu	Cys	Asp	Gln	Arg	Phe	Ser	Pro	Leu	Leu
	35		40		45										
His	Ser	Ser	Arg	His	Val	Arg	Gln	Leu	Thr	Ile	Cys	Asn	Met	Leu	Gln
	50		55		60										

Gly Ala Thr Glu Leu Val Ala Glu Pro Asn Arg Arg Val Leu Glu Thr  
65 70 75 80  
Leu Ala Ser Ser Leu His Thr Leu Lys Phe Arg His Leu Leu Phe Ser  
85 90 95  
Asp Val Ala Ala Gln Gln Ser Leu Arg Gln Leu Leu His Gln Leu Ile  
100 105 110  
His His Gly Ala Val Ser Gln Val Ser Leu Tyr Ser Trp Pro Val Pro  
115 120 125  
Glu Ser Ala Leu Phe Ile Leu Ile Leu Thr Met Ser Ala Gly Phe Trp  
130 135 140  
Gln Pro Gly Pro Gly Gly Pro Pro Cys Arg Leu Cys Gly Glu Ala Ser  
145 150 155 160  
Arg Gly Arg Ala Pro Ser Arg Asp Glu Gly Ser Leu Leu Leu Gly Ser  
165 170 175  
Arg Arg Pro Arg Arg Asp Ala Ala Glu Arg Cys Ala Ala Ala Leu Met  
180 185 190  
Ala Ser Arg Arg Lys Ser Glu Ala Lys Gln Met Pro Arg Ala Ala Pro  
195 200 205  
Ala Thr Arg Val Thr Arg Arg Ser Thr Gln Glu Ser Leu Thr Ala Gly  
210 215 220  
Gly Thr Asp Leu Lys Arg Glu Leu His Pro Pro Ala Thr Ser His Glu  
225 230 235 240  
Ala Pro Gly Thr Lys Arg Ser Pro Ser Ala Pro Ala Ala Thr Ser Ser  
245 250 255  
Ala Ser Ser Ser Thr Ser Ser Tyr Lys Arg Ala Pro Ala Ser Ser Ala  
260 265 270  
Pro Gln Pro Lys Pro Leu Lys Arg Phe Lys Arg Ala Ala Gly Lys Lys  
275 280 285  
Gly Ala Arg Thr Arg Gln Gly Pro Gly Ala Glu Ser Glu Asp Leu Tyr

290 295 300  
Asp Phe Val Phe Ile Val Ala Gly Glu Lys Glu Asp Gly Glu Glu Met  
305 310 315 320  
Glu Ile Gly Glu Val Ala Cys Gly Ala Leu Asp Gly Ser Asp Pro Ser  
325 330 335  
Cys Leu Gly Leu Pro Ala Leu Glu Ala Ser Gln Arg Phe Arg Ser Ile  
340 345 350  
Ser Thr Leu Glu Leu Phe Thr Val Pro Leu Ser Thr Glu Ala Ala Leu  
355 360 365  
Thr Leu Cys His Leu Leu Ser Ser Trp Val Ser Leu Glu Ser Leu Thr  
370 375 380  
Leu Ser Tyr Asn Gly Leu Gly Ser Asn Ile Phe Arg Leu Leu Asp Ser  
385 390 395 400  
Leu Arg Ala Leu Ser Gly Gln Ala Gly Cys Arg Leu Arg Ala Leu His  
405 410 415  
Leu Ser Asp Leu Phe Ser Pro Leu Pro Ile Leu Glu Leu Thr Arg Ala  
420 425 430  
Ile Val Arg Ala Leu Pro Leu Leu Arg Val Leu Ser Ile Arg Val Asp  
435 440 445  
His Pro Ser Gln Arg Asp Asn Pro Gly Val Pro Gly Asn Ala Gly Pro  
450 455 460  
Pro Ser His Ile Ile Gly Asp Glu Glu Ile Pro Glu Asn Cys Leu Glu  
465 470 475 480  
Gln Leu Glu Met Gly Phe Pro Arg Gly Ala Gln Pro Ser Pro Leu Leu  
485 490 495  
Cys Ser Val Leu Lys Ala Ser Gly Ser Leu Gln Gln Leu Ser Leu Asp  
500 505 510  
Ser Ala Thr Phe Ala Ser Pro Gln Asp Phe Gly Leu Val Leu Gln Thr  
515 520 525



Leu Lys Glu Tyr Asn Leu Ala Leu Lys Arg Leu Ser Phe His Asp Met

530

535

540

Asn Leu Ala Asp Cys Gln Ser Glu Val Leu Phe Leu Leu Gln Asn Leu

545

550

555

560

Thr Leu Gln Glu Ile Thr Phe Ser Phe Cys Arg Leu Phe Glu Lys Arg

565

570

575

Pro Ala Gln Phe Leu Pro Glu Met Val Ala Ala Met Lys Gly Asn Ser

580

585

590

Thr Leu Lys Gly Leu Arg Leu Pro Gly Asn Arg Leu Gly Gly Gly Gln

595

600

605

Thr Leu Gly Arg Glu Arg Gly Lys Glu Leu Gly Leu

610

615

620

<210> 3735

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3735

Met Thr Val Cys Pro Ser Leu Ser Ser Cys Thr Ala Ser Ala Ser Leu

1

5

10

15

Gln Leu His Ser Val Ser Leu Ser Pro Pro Ala Gln Cys Gln Pro Leu

20

25

30

Ser Thr Cys Thr Ala Ala Gly Ser Ser Ser Leu Ser Thr Cys Thr Ala

35

40

45

Ser Ala Ser Leu His Leu His Ser Val Ser Leu Ser Pro Pro Ala Gln

50

55

60

Arg Leu Gly Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln Pro Leu Ser

65                      70                      75                      80  
 Thr Cys Thr Ala Ser Ala Ser Leu His Leu His Ser Val Ser Leu Ser  
                          85                      90                      95  
 Pro Pro Ala Gln Arg Leu Gly Ala Ala Val Ser Pro Pro Ala Gln Arg  
                          100                      105                      110  
 Gln Pro Leu Ser Thr Cys Thr Ala Ser Ala Ser Pro Pro Ala Gln Arg  
                          115                      120                      125  
 Gln Pro Leu Ser Thr Cys Thr Val Ala Gly Ser Ser Ser Leu Ser Thr  
                          130                      135                      140  
 Cys Thr Ala Ser Ala Ser Phe His Leu His Ser Val Ser Leu Ser Pro  
 145                      150                      155                      160  
 Pro Ala Gln Arg Leu Gly Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln  
                          165                      170                      175  
 Pro Leu Ser Thr Cys Thr Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln  
                          180                      185                      190  
 Pro Leu Ser Thr Cys Thr Val Ala Ala Ser Leu His Leu His Ser Gly  
                          195                      200                      205  
 Trp Glu Gln Gln Pro Leu His Leu His Asn Ser Ser Leu Ser Pro Pro  
                          210                      215                      220  
 Ala Gln Gln Leu Gly Ala Ala Ala Ser Gln Gly Cys Cys Lys Asp Gly  
 225                      230                      235                      240  
 Val Ser Thr Cys Asn Val Arg Thr Ala Pro Ala Thr His Cys Ala Val  
                          245                      250                      255  
 Cys Arg Ala Val Val Met Val Thr Val Gly Val Thr Gly Gly Arg Glu  
                          260                      265                      270  
 Leu Arg Asp Ser Ser Gly  
                          275

&lt;210&gt; 3736

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3736

Met Asn Thr Leu Ile Phe Thr His Leu Cys Ser Leu Glu Pro Ile Thr

1 5 10 15

Met Ser Gln Asn Cys Ala Tyr Leu Val Leu Val Asp Thr Val Leu Gln

20 25 30

Asn Ile Pro Leu Lys Lys Leu Asn Asn Ser Ala Asn Phe Pro Ile Pro

35 40 45

Ser Leu Pro Val Asp Thr Ile Arg Leu Leu Thr Phe Leu Gln Phe Lys

50 55 60

Lys Thr Leu His Met His Ser Tyr Thr Gln Lys Gln Ser Leu Leu Lys

65 70 75 80

Cys His Leu Leu Asn Glu Val Ile Met Ile Phe Phe Leu Lys Leu Lys

85 90 95

Tyr His Pro Pro Gln His Ser Leu Ile Pro Phe Thr Leu Phe Ser Ile

100 105 110

Val Leu Thr Thr Phe Trp His Ala Val Val Ser Leu Leu Ile Leu Asp

115 120 125

Cys Arg Leu Gln Lys Gly Lys Ser Leu Gly Phe Cys Pro Val Asn Tyr

130 135 140

Glu Gln Cys Leu Ala Asp Asp Lys Lys Thr His Ile Phe Ile Glu Leu

145 150 155 160

Asn Gly His Gly Asn Cys Arg Ile His Met Asn Phe Ser His Ser Cys

165 170 175

Tyr Val Ser Pro Leu Ala His Leu Ser Leu Val

180

185

&lt;210&gt; 3737

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3737

Met Leu Phe Val Phe Arg Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe

1

5

10

15

Arg Gly Arg Thr Ala Asp Phe Val Phe Met Phe Leu Phe Gly Gly Val

20

25

30

Leu Met Thr Val Ser Phe Pro Gln Ala Leu Glu Pro Arg Ala Arg Ala

35

40

45

Pro Arg Arg Pro Ala Cys Val Gly Pro Gly Ala Asn Thr Ala Met Pro

50

55

60

Glu Arg Asp Thr Val Ala Val Ser Ser Leu Val Cys Val Glu Gly Pro

65

70

75

80

Leu Cys Ala Gln Leu Gln Gly Ser Gly Leu Asp Leu Gln Cys Cys Met

85

90

95

Gln Asn Thr Lys Pro Arg Thr Lys Glu Pro Gly Thr Val Pro Ala Leu

100

105

110

Gly Ala His Gly Leu Leu Ala Ala Ala Gly Gln Leu His Pro Arg Gly

115

120

125

Pro Ala Gly Asp Cys Gly Gly Pro Tyr Leu Leu Leu Pro Gly Gly Arg

130

135

140

Leu Pro Gln Pro Ala Trp Arg Gln Glu Ala Pro Ala Asp Pro Trp Leu

145

150

155

160

Pro Val Ser Val Glu Ser Pro Pro Ser Leu Ser Pro Pro Ser Glu Gly  
                             165                            170                            175  
 Ser Pro Pro Met Gly Thr Cys Ala Gly Leu Cys Ser Thr Arg Ala Pro  
                             180                            185                            190  
 Pro His Arg Lys Leu Leu Leu Asp Val Pro Ala Glu Asp Pro Asn Tyr  
                             195                            200                            205  
 Leu Pro Leu Pro Glu Glu Gln Pro Gly Pro His Leu Pro Pro Pro Gln  
                             210                            215                            220  
 Gln  
 225

<210> 3738

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3738

Met Glu Asn Thr Leu Tyr Ile Phe Phe Phe Phe Leu Arg Trp Ser Leu  
           1                            5                            10                            15  
 Thr Leu Ser Pro Arg Leu Val Cys Ser Gly Val Ile Ser Ala His Cys  
                             20                            25                            30  
 Asn Leu Gln Leu Leu Gly Ser Ser Ala Ser Leu Ala Ser Ala Phe Arg  
                             35                            40                            45  
 Val Ala Gly Ile Thr Asp Leu His His His Ala Gln Leu Ile Phe Val  
                             50                            55                            60  
 Phe Leu Val Glu Thr Gly Phe His His Val Gly Gln Val Gly Leu Glu  
                             65                            70                            75                            80  
 Leu Leu Thr Ser Ser Asp Pro Pro Ala Ser Val Ser Glu Ser Ala Gly

	85	90	95
Ile Thr Gly Met Ser His Arg Ala Trp Pro Ser Leu Arg Ile Phe Ser			
	100	105	110
Trp			

&lt;210&gt; 3739

&lt;211&gt; 447

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3739

Met Pro His Val Leu Ile Glu Lys Gly Asp Met Thr Leu Gly Glu Phe			
1	5	10	15
Asp Gln Arg Leu Lys Gly Arg Thr Asp Phe Ile Lys Gly Met Lys Lys			
	20	25	30
Lys Ser Arg Ala Glu Arg Lys Thr Glu Ile Ile Arg Lys Arg Leu His			
	35	40	45
Lys Asp Ile Pro His His Ser Val Ile Met Leu Asn Phe Cys Pro Asp			
	50	55	60
Leu Gln Ser Val Gln Pro Cys Leu Arg Lys Ala His Gly Glu Phe Ile			
	65	70	75
Phe Leu Ile Asp Arg Ser Ser Ser Met Ser Gly Ile Ser Met His Arg			
	85	90	95
Val Lys Asp Ala Met Leu Val Ala Leu Lys Ser Leu Met Pro Ala Cys			
	100	105	110
Leu Phe Asn Ile Ile Gly Phe Gly Ser Thr Phe Lys Ser Leu Phe Pro			
	115	120	125

Ser Ser Gln Thr Tyr Ser Glu Asp Ser Leu Ala Met Ala Cys Asp Asp  
130 135 140  
Ile Gln Arg Met Lys Ala Asp Met Gly Gly Thr Asn Ile Leu Ser Pro  
145 150 155 160  
Leu Lys Trp Val Ile Arg Gln Pro Val His Arg Gly His Pro Arg Leu  
165 170 175  
Leu Phe Val Ile Thr Asp Gly Ala Val Asn Asn Thr Gly Lys Val Leu  
180 185 190  
Glu Leu Val Arg Asn His Ala Phe Ser Thr Arg Cys Tyr Ser Phe Gly  
195 200 205  
Ile Gly Pro Asn Val Cys His Arg Leu Val Lys Gly Leu Ala Ser Val  
210 215 220  
Ser Glu Gly Ser Ala Glu Leu Leu Met Glu Gly Glu Arg Leu Gln Pro  
225 230 235 240  
Lys Met Val Lys Ser Leu Lys Lys Ala Met Ala Pro Val Leu Ser Asp  
245 250 255  
Val Thr Val Glu Trp Ile Phe Pro Glu Thr Thr Glu Val Leu Val Ser  
260 265 270  
Pro Val Ser Ala Ser Ser Leu Phe Pro Gly Glu Arg Leu Val Gly Tyr  
275 280 285  
Gly Ile Val Cys Asp Ala Ser Leu His Ile Ser Asn Pro Arg Ser Asp  
290 295 300  
Lys Arg Arg Arg Tyr Ser Met Leu His Ser Gln Glu Ser Gly Ser Ser  
305 310 315 320  
Val Phe Tyr His Ser Gln Asp Asp Gly Pro Gly Leu Glu Gly Gly Asp  
325 330 335  
Cys Ala Lys Asn Ser Gly Ala Pro Phe Ile Leu Gly Gln Ala Lys Asn  
340 345 350  
Ala Arg Leu Ala Ser Gly Asp Ser Thr Thr Lys His Asp Leu Asn Leu

355	360	365
Ser Gln Arg Arg Arg Ala Tyr Ser Thr Asn Gln Ile Thr Asn His Lys		
370	375	380
Pro Leu Pro Arg Ala Thr Met Ala Ser Asp Pro Met Pro Ala Ala Lys		
385	390	395
Arg Tyr Pro Leu Arg Lys Ala Arg Leu Gln Asp Leu Thr Asn Gln Thr		
405	410	415
Ser Leu Asp Val Gln Arg Trp Gln Ile Asp Leu Gln Ala Phe Ile Cys		
420	425	430
Leu Thr Ser Glu Asp Thr Phe Gln Ile Arg Thr Pro Thr Gly Gln		
435	440	445

&lt;210&gt; 3740

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3740

Met Lys Ala Lys Glu Gly Arg Asn Val Tyr Ser Ser Ser Arg Tyr Asp
1 5 10 15
Asp Tyr Asp Arg Tyr Arg Arg Ser Arg Ser Arg Ser Tyr Glu Arg Arg
20 25 30
Arg Ser Arg Ser Arg Ser Phe Asp Tyr Asn Tyr Arg Arg Ser Tyr Ser
35 40 45
Pro Arg Asn Ser Arg Pro Thr Gly Arg Pro Arg Arg Ser Arg Ser His
50 55 60
Ser Asp Asn Asp Arg Phe Lys His Arg Asn Arg Ser Phe Ser Arg Ser
65 70 75 80



Lys Ser Asn Ser Arg Ser Arg Ser Lys Ser Gln Pro Lys Lys Glu Met  
                             85                            90                            95  
 Lys Ala Lys Ser Arg Ser Arg Ser Ala Ser His Thr Lys Thr Arg Gly  
                             100                            105                            110  
 Thr Ser Lys Thr Asp Ser Lys Thr His Tyr Lys Ser Gly Ser Arg Tyr  
                             115                            120                            125  
 Glu Lys Glu Ser Arg Lys Lys Glu Pro Pro Arg Ser Lys Ser Gln Ser  
                             130                            135                            140  
 Arg Ser Gln Ser Arg Ser Arg Ser Lys Ser Arg Ser Arg Ser Trp Thr  
                             145                            150                            155                            160  
 Ser Pro Lys Ser Ser Gly His  
                             165

<210> 3741

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3741

Met Ala Gln Gln Gly Glu Gly His His Thr His His Gln Ile Leu Leu  
           1                            5                            10                            15  
 Leu Val Ser Gly Phe His Ile Leu Phe Gln Ile Phe Arg Pro Ala His  
                             20                            25                            30  
 Ser Leu Thr Phe Pro Ser Leu Leu His Ser Ser Lys Val Glu Leu Pro  
                             35                            40                            45  
 Ala Ala Thr Gly Ile Ala Ala Lys Trp Glu Arg Ser Arg Val Val Arg  
                             50                            55                            60  
 Ala Ala Pro Asp Asn Leu Gln Arg Ala Leu Leu Glu Leu Gly Cys Ala

65	70	75	80
Ser Leu Asn Leu Ser Tyr Tyr Met Cys Trp Val Arg Asp His Ala Tyr			
	85	90	95
Leu Pro Ala Gln Glu Leu Thr Glu Glu Val Ser Lys Lys Cys Leu Leu			
	100	105	110
Asp Glu			

&lt;210&gt; 3742

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3742

Met Lys Pro Thr Leu Leu Ala Gln Gln Glu Thr Gln Lys Ala Ala Leu			
1	5	10	15
Arg Tyr Glu Arg Ala Val Ser Met His Asn Ala Ala Arg Glu Met Val			
	20	25	30
Phe Val Ala Glu Gln Gly Val Met Ala Asp Lys Asn Arg Leu Asp Pro			
	35	40	45
Thr Trp Gln Glu Met Leu Asn His Ala Thr Cys Lys Val Asn Glu Ala			
	50	55	60
Glu Glu Glu Arg Leu Arg Gly Glu Arg Glu His Gln Arg Val Thr Arg			
	65	70	75
Leu Cys Gln Gln Ala Glu Ala Arg Val Gln Ala Leu Gln Lys Thr Leu			
	85	90	95
Arg Arg Ala Ile Gly Lys Ser Arg Pro Tyr Phe Glu Leu Lys Ala Gln			
	100	105	110

Phe Ser Gln Ile Leu Glu Glu His Lys Ala Lys Val Thr Glu Leu Glu  
115 120 125  
Gln Gln Val Ala Gln Ala Lys Thr Arg Tyr Ser Val Ala Leu Arg Asn  
130 135 140  
Leu Glu Gln Ile Ser Glu Gln Ile His Ala Arg Arg Arg Gly Gly Leu  
145 150 155 160  
Pro Pro His Pro Leu Gly Pro Arg Arg Ser Ser Pro Val Gly Ala Glu  
165 170 175  
Ala Gly Pro Glu Asp Met Glu Asp Gly Asp Ser Gly Ile Glu Gly Ala  
180 185 190  
Glu Gly Ala Gly Leu Glu Glu Gly Ser Ser Leu Gly Pro Gly Pro Ala  
195 200 205  
Pro Asp Thr Asp Thr Leu Ser Leu Leu Ser Leu Arg Thr Val Ala Ser  
210 215 220  
Asp Leu Gln Lys Cys Asp Ser Val Glu His Leu Arg Gly Leu Ser Asp  
225 230 235 240  
His Val Ser Leu Asp Gly Gln Glu Leu Gly Thr Arg Ser Gly Gly Arg  
245 250 255  
Arg Gly Ser Asp Gly Gly Ala Arg Gly Gly Arg His Gln Arg Ser Val  
260 265 270  
Ser Leu

&lt;210&gt; 3743

&lt;211&gt; 1085

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3743

Met	Lys	Ile	Gly	Ser	Glu	Glu	Leu	Val	Tyr	Ile	Thr	His	Ile	Asp	Asp
1				5					10					15	
Pro	Trp	Thr	Phe	Tyr	Cys	Gln	Leu	Ala	Arg	Asn	Ala	Asn	Ile	Leu	Glu
			20					25						30	
Glu	Leu	Ser	Cys	Ser	Ile	Thr	Gln	Leu	Ser	Lys	Val	Leu	Leu	Asn	Leu
		35					40						45		
Lys	Thr	Ser	Pro	Leu	Asn	Pro	Gly	Thr	Leu	Cys	Leu	Ala	Lys	Tyr	Thr
	50					55					60				
Asp	Gly	Asn	Trp	Tyr	Arg	Gly	Ile	Val	Ile	Glu	Lys	Glu	Pro	Lys	Lys
65					70					75				80	
Val	Phe	Phe	Val	Asp	Phe	Gly	Asn	Ile	Tyr	Val	Val	Thr	Ser	Asp	Asp
			85						90					95	
Leu	Leu	Pro	Ile	Pro	Ser	Asp	Ala	Tyr	Asp	Val	Leu	Leu	Leu	Pro	Met
		100						105						110	
Gln	Ala	Val	Arg	Cys	Ser	Leu	Ser	Asp	Ile	Pro	Asp	His	Ile	Pro	Glu
		115						120					125		
Glu	Val	Val	Val	Trp	Phe	Gln	Glu	Thr	Ile	Leu	Asp	Lys	Ser	Leu	Lys
	130					135						140			
Ala	Leu	Val	Val	Ala	Lys	Asp	Pro	Asp	Gly	Thr	Leu	Ile	Ile	Glu	Leu
145					150					155				160	
Tyr	Gly	Asp	Asn	Ile	Gln	Ile	Ser	Ala	Ser	Ile	Asn	Lys	Lys	Leu	Gly
			165						170					175	
Leu	Leu	Ser	Tyr	Lys	Asp	Arg	Ile	Arg	Lys	Lys	Glu	Ser	Glu	Val	Leu
		180						185					190		
Cys	Ser	Thr	Thr	Glu	Thr	Leu	Glu	Glu	Lys	Asn	Glu	Asn	Met	Lys	Leu
		195						200					205		
Pro	Cys	Thr	Glu	Tyr	Leu	Ser	Lys	Ser	Val	Gly	Tyr	Lys	Leu	Pro	Asn
	210						215						220		

Lys Glu Ile Leu Glu Glu Ser Tyr Lys Pro Gln Ile Asn Ser Ser Tyr  
225 230 235 240  
Lys Glu Leu Lys Leu Leu Gln Ser Leu Thr Lys Thr Asn Leu Val Thr  
245 250 255  
Gln Tyr Gln Asp Ser Val Gly Asn Lys Asn Ser Gln Val Phe Pro Leu  
260 265 270  
Thr Thr Glu Lys Lys Glu Glu Ile Ser Ala Glu Thr Pro Leu Lys Thr  
275 280 285  
Ala Arg Val Glu Ala Thr Leu Ser Glu Arg Lys Ile Gly Asp Ser Cys  
290 295 300  
Asp Lys Asp Leu Pro Leu Lys Phe Cys Glu Phe Pro Gln Lys Thr Ile  
305 310 315 320  
Met Pro Gly Phe Lys Thr Thr Val Tyr Val Ser His Ile Asn Asp Leu  
325 330 335  
Ser Asp Phe Tyr Val Gln Leu Ile Glu Asp Glu Ala Glu Ile Ser His  
340 345 350  
Leu Ser Glu Arg Leu Asn Ser Val Lys Thr Arg Pro Glu Tyr Tyr Val  
355 360 365  
Gly Pro Pro Leu Gln Arg Gly Asp Met Ile Cys Ala Val Phe Pro Glu  
370 375 380  
Asp Asn Leu Trp Tyr Arg Ala Val Ile Lys Glu Gln Gln Pro Asn Asp  
385 390 395 400  
Leu Leu Ser Val Gln Phe Ile Asp Tyr Gly Asn Val Ser Val Val His  
405 410 415  
Thr Asn Lys Ile Gly Arg Leu Asp Leu Val Asn Ala Ile Leu Pro Gly  
420 425 430  
Leu Cys Ile His Cys Ser Leu Gln Gly Phe Glu Val Pro Asp Asn Lys  
435 440 445  
Asn Ser Lys Lys Met Met His Tyr Phe Ser Gln Arg Thr Ser Glu Ala

450                      455                      460  
Ala Ile Arg Cys Glu Phe Val Lys Phe Gln Asp Arg Trp Glu Val Ile  
465                      470                      475                      480  
Leu Ala Asp Glu His Gly Ile Ile Ala Asp Asp Met Ile Ser Arg Tyr  
                    485                      490                      495  
Ala Leu Ser Glu Lys Ser Gln Val Glu Leu Ser Thr Gln Val Ile Lys  
                    500                      505                      510  
Ser Ala Ser Ser Lys Ser Val Asn Lys Ser Asp Ile Asp Thr Ser Val  
                    515                      520                      525  
Phe Leu Asn Trp Tyr Asn Pro Glu Lys Lys Met Ile Arg Ala Tyr Ala  
                    530                      535                      540  
Thr Val Ile Asp Gly Pro Glu Tyr Phe Trp Cys Gln Phe Ala Asp Thr  
545                      550                      555                      560  
Glu Lys Leu Gln Cys Leu Glu Val Glu Val Gln Thr Ala Gly Glu Gln  
                    565                      570                      575  
Val Ala Asp Arg Arg Asn Cys Ile Pro Cys Pro Tyr Ile Gly Asp Pro  
                    580                      585                      590  
Cys Ile Val Arg Tyr Arg Glu Asp Gly His Tyr Tyr Arg Ala Leu Ile  
                    595                      600                      605  
Thr Asn Ile Cys Glu Asp Tyr Leu Val Ser Val Arg Leu Val Asp Phe  
                    610                      615                      620  
Gly Asn Ile Glu Asp Cys Val Asp Pro Lys Ala Leu Trp Ala Ile Pro  
625                      630                      635                      640  
Ser Glu Leu Leu Ser Val Pro Met Gln Ala Phe Pro Cys Cys Leu Ser  
                    645                      650                      655  
Gly Phe Asn Ile Ser Glu Gly Leu Cys Ser Gln Glu Gly Asn Asp Tyr  
                    660                      665                      670  
Phe Tyr Glu Ile Ile Thr Glu Asp Val Leu Glu Ile Thr Ile Leu Glu  
                    675                      680                      685

Ile Arg Arg Asp Val Cys Asp Ile Pro Leu Ala Ile Val Asp Leu Lys  
690 695 700  
Ser Lys Gly Lys Ser Ile Asn Glu Lys Met Glu Lys Tyr Ser Lys Thr  
705 710 715 720  
Gly Ile Lys Ser Ala Leu Pro Tyr Glu Asn Ile Asp Ser Glu Ile Lys  
725 730 735  
Gln Thr Leu Gly Ser Tyr Asn Leu Asp Val Gly Leu Lys Lys Leu Ser  
740 745 750  
Asn Lys Ala Val Gln Asn Lys Ile Tyr Met Glu Gln Gln Thr Asp Glu  
755 760 765  
Leu Ala Glu Ile Thr Glu Lys Asp Val Asn Ile Ile Gly Thr Lys Pro  
770 775 780  
Ser Asn Phe Arg Asp Pro Lys Thr Asp Asn Ile Cys Glu Gly Phe Glu  
785 790 795 800  
Asn Pro Cys Lys Asp Lys Ile Asp Thr Glu Glu Leu Glu Gly Glu Leu  
805 810 815  
Glu Cys His Leu Val Asp Lys Ala Glu Phe Asp Asp Lys Tyr Leu Ile  
820 825 830  
Thr Gly Phe Asn Thr Leu Leu Pro His Ala Asn Glu Thr Lys Glu Ile  
835 840 845  
Leu Glu Leu Asn Ser Leu Glu Val Pro Leu Ser Pro Asp Asp Glu Ser  
850 855 860  
Lys Glu Phe Leu Glu Leu Glu Ser Ile Glu Leu Gln Asn Ser Leu Val  
865 870 875 880  
Val Asp Glu Glu Lys Gly Glu Leu Ser Pro Val Pro Pro Asn Val Pro  
885 890 895  
Leu Ser Gln Glu Cys Val Thr Lys Gly Ala Met Glu Leu Phe Thr Leu  
900 905 910  
Gln Leu Pro Leu Ser Cys Glu Ala Glu Lys Gln Pro Glu Leu Glu Leu

915	920	925	
Pro Thr Ala Gln Leu Pro Leu Asp Asp Lys Met Asp Pro Leu Ser Leu			
930	935	940	
Gly Val Ser Gln Lys Ala Gln Glu Ser Met Cys Thr Glu Asp Met Arg			
945	950	955	960
Lys Ser Ser Cys Val Glu Ser Phe Asp Asp Gln Arg Arg Met Ser Leu			
965	970	975	
His Leu His Gly Ala Asp Cys Asp Pro Lys Thr Gln Asn Glu Met Asn			
980	985	990	
Ile Cys Glu Glu Glu Phe Val Glu Tyr Lys Asn Arg Asp Ala Ile Ser			
995	1000	1005	
Ala Leu Met Pro Leu Phe Ser Glu Glu Glu Ser Ser Asp Gly Ser Lys			
1010	1015	1020	
His Asn Asn Gly Leu Pro Asp His Ile Ser Ala Gln Leu Gln Asn Thr			
1025	1030	1035	1040
Tyr Thr Leu Lys Ala Phe Thr Val Gly Ser Lys Cys Val Val Trp Ser			
1045	1050	1055	
Ser Leu Arg Asn Thr Trp Ser Lys Cys Glu Ile Leu Glu Thr Ala Glu			
1060	1065	1070	
Glu Gly Thr Arg Lys Arg Gly Leu Glu Val Met Glu Ile			
1075	1080	1085	

&lt;210&gt; 3744

&lt;211&gt; 1060

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3744



Met	Gly	Asn	Ser	Ile	Thr	Tyr	Arg	Asp	Gln	Ala	Ala	Val	Glu	Asn	His
1				5					10					15	
Leu	Glu	Gln	Arg	Leu	His	Gln	Pro	Gln	Lys	Leu	Leu	Glu	Asp	Leu	Arg
			20					25					30		
Lys	Thr	Asp	Ala	Gln	Gln	Phe	Arg	Thr	Ala	Met	Lys	Cys	Leu	Leu	Glu
		35				40						45			
Asp	Lys	Lys	Asp	Gly	Leu	Asp	Leu	Lys	Asp	Ile	Ile	Ile	Asp	Leu	Gly
	50					55						60			
Glu	Ile	Arg	Glu	Arg	Ala	Leu	Gln	Ser	Pro	Gly	Val	Asn	Arg	Ser	Leu
65				70						75				80	
Phe	Leu	Ile	Thr	Leu	Glu	Arg	Cys	Phe	Gln	Met	Leu	Asn	Ser	Leu	Glu
				85					90					95	
Cys	Val	Glu	Ile	Leu	Gly	Lys	Val	Leu	Arg	Gly	Ser	Ser	Gly	Ser	Phe
		100						105					110		
Leu	Gln	Pro	Asp	Ile	Thr	Glu	Arg	Leu	Pro	Arg	Asp	Leu	Arg	Glu	Asp
		115					120					125			
Ala	Phe	Lys	Asn	Leu	Ser	Ala	Val	Phe	Lys	Asp	Leu	Tyr	Asp	Lys	Thr
	130					135					140				
Ser	Ala	His	Ser	Gln	Arg	Ala	Leu	Tyr	Ser	Trp	Met	Thr	Gly	Ile	Leu
145				150						155				160	
Gln	Thr	Ser	Ser	Asn	Ala	Thr	Asp	Asp	Ser	Ala	Ser	Trp	Val	Ser	Ala
				165					170					175	
Glu	His	Leu	Trp	Val	Leu	Gly	Arg	Tyr	Met	Val	His	Leu	Ser	Phe	Glu
		180						185				190			
Glu	Ile	Thr	Lys	Ile	Ser	Pro	Ile	Glu	Ile	Gly	Leu	Phe	Ile	Ser	Tyr
		195					200					205			
Asp	Asn	Ala	Thr	Lys	Gln	Leu	Asp	Met	Val	Tyr	Asp	Ile	Thr	Pro	Glu
	210					215						220			
Leu	Ala	Gln	Ala	Phe	Leu	Glu	Arg	Ile	Ser	Ser	Ser	Asn	Phe	Asn	Met

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Ala Leu Phe Leu Tyr Glu Leu Leu Leu Lys Thr Thr Arg Arg Pro Glu  
465 470 475 480  
Glu Leu Leu Ser Ala Gly Gln Leu Val Lys Gly Val Thr Cys Ser His  
485 490 495  
Ile Asp Ala Met Ser Thr Asp Phe Phe Leu Ala His Phe Gln Asp Phe  
500 505 510  
Gln Asn Asn Phe Ala Leu Leu Ser Pro Tyr Gln Val Asn Cys Leu Ala  
515 520 525  
Trp Lys Tyr Trp Glu Val Ser Arg Leu Ser Met Pro Pro Phe Leu Leu  
530 535 540  
Ala Ala Leu Pro Ala Arg Tyr Leu Ala Ser Val Pro Ala Ser Gln Cys  
545 550 555 560  
Val Pro Phe Leu Ile Ser Leu Gly Lys Ser Trp Leu Asp Ser Leu Val  
565 570 575  
Leu Asp Ser His Lys Lys Thr Ser Val Leu Arg Lys Val Gln Gln Cys  
580 585 590  
Leu Asp Asp Ser Ile Ala Asp Glu Tyr Thr Val Asp Ile Met Gly Asn  
595 600 605  
Leu Leu Cys His Leu Pro Ala Ala Ile Ile Asp Arg Gly Ile Ser Pro  
610 615 620  
Arg Ala Trp Ala Thr Ala Leu His Gly Leu Arg Asp Cys Pro Asp Leu  
625 630 635 640  
Asn Pro Glu Gln Lys Ala Ala Val Arg Leu Lys Leu Leu Gly Gln Tyr  
645 650 655  
Gly Leu Pro Gln His Trp Thr Ala Glu Thr Thr Lys Asp Leu Gly Pro  
660 665 670  
Phe Leu Val Leu Phe Ser Gly Asp Glu Leu Ser Ser Ile Ala Thr Lys  
675 680 685  
Phe Pro Glu Ile Leu Leu Gln Ala Ala Ser Lys Met Ala Arg Thr Leu

690                      695                      700  
Pro Thr Lys Glu Phe Leu Trp Ala Val Phe Gln Ser Val Arg Asn Ser  
705                      710                      715                      720  
Ser Asp Lys Ile Pro Ser Tyr Asp Pro Met Pro Gly Cys His Gly Val  
                         725                      730                      735  
Val Ala Pro Ser Ser Asp Asp Ile Phe Lys Leu Ala Glu Ala Asn Ala  
                         740                      745                      750  
Cys Trp Ala Leu Glu Asp Leu Arg Cys Met Glu Glu Asp Thr Phe Ile  
                         755                      760                      765  
Arg Thr Val Glu Leu Leu Gly Ala Val Gln Gly Phe Ser Arg Pro Gln  
                         770                      775                      780  
Leu Met Thr Leu Lys Glu Lys Ala Ile Gln Val Trp Asp Met Pro Ser  
785                      790                      795                      800  
Tyr Trp Arg Glu His His Ile Val Ser Leu Gly Arg Ile Ala Leu Ala  
                         805                      810                      815  
Leu Asn Glu Ser Glu Leu Glu Gln Leu Asp Leu Ser Ser Ile Asp Thr  
                         820                      825                      830  
Val Ala Ser Leu Ser Trp Gln Thr Glu Trp Thr Pro Gly Gln Ala Glu  
                         835                      840                      845  
Ser Ile Leu Gln Gly Tyr Leu Asp Asp Ser Gly Tyr Ser Ile Gln Asp  
                         850                      855                      860  
Leu Lys Ser Phe His Leu Val Gly Leu Gly Ala Thr Leu Cys Ala Ile  
865                      870                      875                      880  
Asn Ile Thr Glu Ile Pro Leu Ile Lys Ile Ser Glu Phe Arg Val Val  
                         885                      890                      895  
Val Ala Arg Ile Gly Thr Leu Leu Cys Ser Thr His Val Leu Ala Glu  
                         900                      905                      910  
Phe Lys Arg Lys Ala Glu Val Val Phe Gly Asp Pro Thr Glu Trp Thr  
                         915                      920                      925

Ser Ser Val Leu Gln Glu Leu Gly Thr Ile Ala Ala Gly Leu Thr Lys

930

935

940

Ala Glu Leu Arg Met Leu Asp Lys Asp Leu Met Pro Tyr Phe Gln Pro

945

950

955

960

Ser Ala Ile Lys Cys Leu Pro Asp Glu Ile Phe Lys Glu Leu Ser Ala

965

970

975

Glu Gln Ile Ala Ser Leu Gly Pro Glu Asn Ala Ala Ala Val Thr His

980

985

990

Ala Gln Arg Arg Arg Leu Ser Pro Leu Gln Leu Gln Ser Leu Gln Gln

995

1000

1005

Ala Leu Asp Gly Ala Lys Thr His Ser Trp Gln Asp Ala Pro Ala Ser

1010

1015

1020

Ala Gly Pro Thr Arg Thr Ser Ser Ser Arg Ser Pro Ala Gly Ala Leu

1025

1030

1035

1040

Gln Ser Trp Gly Leu Trp Leu Gly Cys Pro Leu Leu Val Leu Met Ala

1045

1050

1055

Lys Leu Leu Trp

1060

<210> 3745

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3745

Met Gly Lys Asn Val Ser Lys Ala Val Glu His Ile Asn Lys Thr Ile

1

5

10

15

Glu Pro Ala Leu Ile Ser Lys His Leu Asn Val Ile Glu Gln Lys Arg

	20		25		30										
Ile	Asp	Lys	Leu	Met	Ile	Glu	Thr	Val	Asp	Pro	Asp	Asn	Arg	Ser	Lys
	35		40		45										
Phe	Gly	Val	Asn	Ile	Ile	Leu	Gly	Ile	Ser	Phe	Ala	Val	Cys	Lys	Ala
	50		55		60										
Gly	Ala	Ala	Glu	Lys	Gly	Phe	Ser	Leu	Leu	Ser	Gln	Asn	Cys	Glu	Phe
	65		70		75									80	
Ala	Gly	Asn	Ser	Glu	Gly	Ile	Leu	Leu	Val	Pro	Ala	Phe	Thr	Val	Thr
			85		90									95	
Ser	Asn	Gly	Ser	Gln	Ser	Gly	Asn	Lys	Leu	Ala	Val				
	100		105												

&lt;210&gt; 3746

&lt;211&gt; 1557

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3746

Met	Gln	Asn	Ile	Pro	Phe	Pro	Ser	Pro	Gln	Arg	Pro	Arg	Ile	Leu	Val
1			5					10					15		
Gln	Leu	Ser	Val	His	Asp	Ala	Leu	Ile	Leu	Ser	Gln	Pro	Val	Ser	Thr
			20					25					30		
Pro	Leu	Pro	Leu	Ser	Gly	Ala	Asn	Phe	Ser	Thr	Leu	Leu	Met	Asn	Leu
		35					40						45		
Gly	Pro	Glu	Asn	Cys	Ala	Thr	Leu	Leu	Leu	Phe	Val	Leu	Leu	Glu	Ser
		50					55						60		
Lys	Ile	Leu	Leu	His	Ser	Leu	Arg	Pro	Ala	Val	Leu	Thr	Gly	Val	Ala
		65				70					75				80

Glu Ala Val Val Ala Met Ile Phe Pro Phe Gln Trp Gln Cys Pro Tyr  
                     85                    90                    95  
 Ile Pro Leu Cys Pro Leu Ser Leu Ala Ala Val Leu Ser Ala Pro Leu  
                     100                    105                    110  
 Pro Phe Ile Val Gly Val Asp Ser Arg Tyr Phe Asp Leu His Asp Pro  
                     115                    120                    125  
 Pro Gln Asp Val Val Cys Ile Asp Leu Asp Thr Asn Met Leu Tyr Val  
                     130                    135                    140  
 Ser Asp Glu Lys Lys Asn Met Asn Trp Lys Gln Leu Pro Lys Lys Pro  
 145                    150                    155                    160  
 Cys Lys Asn Leu Leu Ser Thr Leu Lys Lys Leu Tyr Pro Gln Leu Ser  
                     165                    170                    175  
 Ser Val His Gln Lys Thr Gln Glu Gly Ser Ala Ile Asp Met Thr Pro  
                     180                    185                    190  
 Ile Glu Ala Asp Phe Ser Trp Gln Lys Lys Met Thr Gln Leu Glu Met  
                     195                    200                    205  
 Glu Ile Gln Glu Ala Phe Leu Arg Phe Met Ala Ser Ile Leu Lys Gly  
                     210                    215                    220  
 Tyr Arg Thr Tyr Leu Arg Pro Ile Thr Glu Ala Pro Ser Asn Lys Ala  
 225                    230                    235                    240  
 Thr Ala Ala Asp Ser Leu Phe Asp Arg Gln Gly Phe Leu Lys Ser Arg  
                     245                    250                    255  
 Asp Arg Ala Tyr Ala Lys Phe Tyr Thr Leu Leu Ser Lys Thr Gln Ile  
                     260                    265                    270  
 Phe Ile Arg Phe Ile Glu Glu Cys Ser Phe Val Ser Asp Lys Asp Thr  
                     275                    280                    285  
 Gly Leu Ala Phe Phe Asp Asp Cys Ile Glu Lys Leu Phe Pro Asp Lys  
                     290                    295                    300  
 Gly Thr Glu Lys Thr Asp Lys Val Asp Phe Asp Ser Ala Glu Asp Thr

305                      310                      315                      320  
Arg Leu Ile Glu Leu Asp Asp Ser Gln Lys Gly Glu His Thr Val Phe  
                         325                      330                      335  
Ile Met Pro Pro Glu Pro Pro Pro Asp Asp Gly Lys Asp Leu Ser Pro  
                         340                      345                      350  
Lys Tyr Ser Tyr Lys Tyr Phe Pro Arg Leu Asp Leu Lys Leu Phe Asp  
                         355                      360                      365  
Arg Pro Gln Glu Leu Lys Leu Cys Phe Ser Arg His Pro Thr Gly Asn  
                         370                      375                      380  
Ser Ile Thr Lys Ser Pro Pro Leu Met Ala Lys Arg Thr Lys Gln Glu  
385                      390                      395                      400  
Ile Lys Thr Ala His Lys Leu Ala Lys Arg Cys Tyr Thr Asn Pro Pro  
                         405                      410                      415  
Gln Trp Ala Lys Cys Leu Phe Ser His Cys Tyr Ser Leu Trp Phe Ile  
                         420                      425                      430  
Cys Leu Pro Ala Tyr Val Arg Val Ser His Pro Lys Val Arg Ala Leu  
                         435                      440                      445  
Gln Gln Ala Tyr Asp Val Leu Ile Lys Met Arg Lys Thr Asp Val Asp  
                         450                      455                      460  
Pro Leu Asp Glu Val Cys Tyr Arg Val Val Met Gln Leu Cys Gly Leu  
465                      470                      475                      480  
Trp Gly His Pro Val Leu Ala Val Arg Val Leu Phe Glu Met Lys Thr  
                         485                      490                      495  
Ala Arg Ile Lys Pro Asn Ala Ile Thr Tyr Gly Tyr Tyr Asn Lys Val  
                         500                      505                      510  
Val Leu Glu Ser Pro Trp Pro Ser Ser Thr Arg Ser Gly Ile Phe Leu  
                         515                      520                      525  
Trp Thr Lys Val Arg Asn Val Val Arg Gly Leu Ala Gln Phe Arg Gln  
                         530                      535                      540



Pro Leu Lys Lys Thr Val Gln Arg Ser Gln Val Ser Ser Ile Ser Gly  
545 550 555 560  
Gly Gln Ser Asp Gln Gly Tyr Gly Ser Lys Asp Glu Leu Ile Lys Asp  
565 570 575  
Asp Ala Glu Ile His Val Pro Glu Glu Gln Ala Ala Arg Glu Leu Ile  
580 585 590  
Thr Lys Thr Lys Met Gln Thr Glu Glu Val Cys Asp Ala Ser Ala Ile  
595 600 605  
Val Ala Lys His Ser Gln Pro Ser Pro Glu Pro His Ser Pro Thr Glu  
610 615 620  
Pro Pro Ala Trp Gly Ser Ser Ile Val Lys Val Pro Ser Gly Ile Phe  
625 630 635 640  
Asp Val Asn Ser Arg Lys Ser Ser Thr Gly Ser Ile Ser Asn Val Leu  
645 650 655  
Phe Ser Thr Gln Asp Pro Val Glu Asp Ala Val Phe Gly Glu Ala Thr  
660 665 670  
Asn Leu Lys Lys Asn Gly Asp Arg Gly Glu Lys Arg Gln Lys His Phe  
675 680 685  
Pro Glu Arg Ser Cys Ser Phe Ser Ser Glu Ser Arg Ala Gly Met Leu  
690 695 700  
Leu Lys Lys Ser Ser Leu Asp Ser Asn Ser Ser Glu Met Ala Ile Met  
705 710 715 720  
Met Gly Ala Asp Ala Lys Ile Leu Thr Ala Ala Leu Thr Cys Pro Lys  
725 730 735  
Thr Ser Leu Leu His Ile Ala Arg Thr His Ser Phe Glu Asn Val Ser  
740 745 750  
Cys His Leu Pro Asp Ser Arg Thr Cys Met Ser Glu Ser Thr Trp Asn  
755 760 765  
Pro Glu His Arg Ser Ser Pro Val Pro Glu Met Leu Glu Glu Ser Gln

770                      775                      780  
Glu Leu Leu Glu Pro Val Val Asp Asp Val Pro Lys Thr Thr Ala Thr  
785                      790                      795                      800  
Val Asp Thr Tyr Glu Ser Leu Leu Ser Asp Ser Asn Ser Asn Gln Ser  
                    805                      810                      815  
Arg Asp Leu Lys Thr Val Ser Lys Asp Leu Arg Asn Lys Arg Ser Ser  
                    820                      825                      830  
Leu Tyr Gly Ile Ala Lys Val Val Gln Arg Glu Asp Val Glu Thr Gly  
                    835                      840                      845  
Leu Asp Pro Leu Ser Leu Leu Ala Thr Glu Cys Thr Gly Gly Lys Thr  
                    850                      855                      860  
Pro Asp Ser Glu Asp Lys Leu Phe Ser Pro Val Ile Ala Arg Asn Leu  
865                      870                      875                      880  
Ala Asp Glu Ile Glu Ser Tyr Met Asn Leu Lys Ser Pro Leu Gly Ser  
                    885                      890                      895  
Lys Ser Ser Ser Met Glu Leu His Arg Glu Glu Asn Arg Glu Ser Gly  
                    900                      905                      910  
Met Thr Thr Ala Phe Ile His Ala Leu Glu Arg Arg Ser Ser Leu Pro  
                    915                      920                      925  
Leu Asp His Gly Ser Pro Ala Gln Glu Asn Pro Glu Ser Glu Lys Ser  
                    930                      935                      940  
Ser Pro Ala Val Ser Arg Ser Lys Thr Phe Thr Gly Arg Phe Lys Gln  
945                      950                      955                      960  
Gln Thr Pro Ser Arg Thr His Lys Glu Arg Ser Thr Ser Leu Ser Ala  
                    965                      970                      975  
Leu Val Arg Ser Ser Pro His Gly Ser Leu Gly Ser Val Val Asn Ser  
                    980                      985                      990  
Leu Ser Gly Leu Lys Leu Asp Asn Ile Leu Ser Gly Pro Lys Ile Asp  
                    995                      1000                      1005

Val Leu Lys Ser Gly Met Lys Gln Ala Ala Thr Val Ala Ser Lys Met  
1010 1015 1020  
Trp Val Ala Val Ala Ser Ala Tyr Ser Tyr Ser Asp Asp Glu Glu Glu  
1025 1030 1035 1040  
Thr Asn Arg Asp Tyr Ser Phe Pro Ala Gly Leu Glu Asp His Ile Leu  
1045 1050 1055  
Gly Glu Asn Ile Ser Pro Asn Thr Ser Ile Ser Gly Leu Val Pro Ser  
1060 1065 1070  
Glu Leu Thr Gln Ser Asn Thr Ser Leu Gly Ser Ser Ser Ser Ser Gly  
1075 1080 1085  
Asp Val Gly Lys Leu His Tyr Pro Thr Gly Glu Val Pro Phe Pro Arg  
1090 1095 1100  
Gly Met Lys Gly Gln Asp Phe Glu Lys Ser Asp His Gly Ser Ser Gln  
1105 1110 1115 1120  
Asn Thr Ser Met Ser Ser Ile Tyr Gln Asn Cys Ala Met Glu Val Leu  
1125 1130 1135  
Met Ser Ser Cys Ser Gln Cys Arg Ala Cys Gly Ala Leu Val Tyr Asp  
1140 1145 1150  
Glu Glu Ile Met Ala Gly Trp Thr Ala Asp Asp Ser Asn Leu Asn Thr  
1155 1160 1165  
Ala Cys Pro Phe Cys Lys Ser Asn Phe Leu Pro Leu Leu Asn Ile Glu  
1170 1175 1180  
Phe Lys Asp Leu Arg Gly Ser Ala Ser Phe Phe Leu Lys Pro Ser Thr  
1185 1190 1195 1200  
Ser Gly Asp Ser Leu Gln Ser Gly Ser Ile Pro Leu Ala Asn Glu Ser  
1205 1210 1215  
Leu Glu His Lys Pro Val Ser Ser Leu Ala Glu Pro Asp Leu Ile Asn  
1220 1225 1230  
Phe Met Asp Phe Pro Lys His Asn Gln Ile Ile Thr Glu Glu Thr Gly

1235	1240	1245	
Ser Ala Val Glu Pro Ser Asp Glu Ile Lys Arg Ala Ser Gly Asp Val			
1250	1255	1260	
Gln Thr Met Lys Ile Ser Ser Val Pro Asn Ser Leu Ser Lys Arg Asn			
1265	1270	1275	1280
Val Ser Leu Thr Arg Ser His Ser Val Gly Gly Pro Leu Gln Asn Ile			
1285	1290	1295	
Asp Phe Thr Gln Arg Pro Phe His Gly Ile Ser Thr Val Ser Leu Pro			
1300	1305	1310	
Asn Ser Leu Gln Glu Val Val Asp Pro Leu Gly Lys Arg Pro Asn Pro			
1315	1320	1325	
Pro Pro Val Ser Val Pro Tyr Leu Ser Pro Leu Val Leu Arg Lys Glu			
1330	1335	1340	
Leu Glu Ser Leu Leu Glu Asn Glu Gly Asp Gln Val Ile His Thr Ser			
1345	1350	1355	1360
Ser Phe Ile Asn Gln His Pro Ile Ile Phe Trp Asn Leu Val Trp Tyr			
1365	1370	1375	
Phe Arg Arg Leu Asp Leu Pro Ser Asn Leu Pro Gly Leu Ile Leu Thr			
1380	1385	1390	
Ser Glu His Cys Asn Glu Gly Val Gln Leu Pro Leu Ser Ser Leu Ser			
1395	1400	1405	
Gln Asp Ser Lys Leu Val Tyr Ile Gln Leu Leu Trp Asp Asn Ile Asn			
1410	1415	1420	
Leu His Gln Glu Pro Arg Glu Pro Leu Tyr Val Ser Trp Arg Asn Phe			
1425	1430	1435	1440
Asn Ser Glu Lys Lys Ser Ser Leu Leu Ser Glu Glu Gln Gln Glu Thr			
1445	1450	1455	
Ser Thr Leu Val Glu Thr Ile Arg Gln Ser Ile Gln His Asn Asn Val			
1460	1465	1470	

Leu Lys Pro Ile Asn Leu Leu Ser Gln Gln Met Lys Pro Gly Met Lys  
 1475 1480 1485  
 Arg Gln Arg Ser Leu Tyr Arg Glu Ile Leu Phe Leu Ser Leu Val Ser  
 1490 1495 1500  
 Leu Gly Arg Glu Asn Ile Asp Ile Glu Ala Phe Asp Asn Glu Tyr Gly  
 1505 1510 1515 1520  
 Ile Ala Tyr Asn Ser Leu Ser Ser Glu Ile Leu Glu Arg Leu Gln Lys  
 1525 1530 1535  
 Ile Asp Ala Pro Pro Ser Ala Ser Val Glu Trp Cys Arg Lys Cys Phe  
 1540 1545 1550  
 Gly Ala Pro Leu Ile  
 1555

<210> 3747

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3747

Met Tyr Val Phe Gln Leu Phe Asp Tyr Tyr Ser Ala Ser Gly Thr Thr  
 1 5 10 15  
 Leu Leu Trp Gln Ala Phe Trp Glu Cys Val Val Val Val Trp Val Tyr  
 20 25 30  
 Gly Ala Asp Arg Phe Thr Asp Asp Ile Ala Cys Met Ile Gly Tyr Arg  
 35 40 45  
 Pro Cys Pro Trp Met Lys Trp Cys Trp Ser Phe Phe Thr Pro Leu Val  
 50 55 60  
 Cys Met Gly Ile Phe Ile Phe Asn Val Val Tyr Tyr Lys Pro Leu Val

65	70	75	80
Tyr Lys Asn Thr Asn Val Tyr Pro Trp Trp Gly Glu Ala Met Gly Trp			
	85	90	95
Ala Phe Val Leu Ser Ser Met Leu Cys Met Pro Leu His Leu Leu Gly			
	100	105	110
Cys Leu Leu Arg Ala Lys Gly Thr Met Ala Glu Cys Trp Lys His Leu			
	115	120	125
Thr Gln Pro Ile Trp Gly Leu His His Leu Glu Tyr Arg Ala Gln Asp			
	130	135	140
Ala Asp Val Arg Gly Leu Thr Thr Leu Thr Pro Val Ser Glu Ser Ser			
145	150	155	160
Lys Val Val Val Val Glu Ser Val Met Gly Gln Leu Ser Ser His His			
	165	170	175
Gln Leu Thr Ser Gly Leu Trp Gly Lys Arg Leu Gln Tyr Ser Ile Leu			
	180	185	190
Gly Val Trp Ala Ala Asn Leu Ala Cys Ser Gly Phe Pro Pro Cys Ala			
	195	200	205
Leu Gly Trp Ala His Pro Arg Glu Gly Thr Pro Asp Thr Ala Pro Thr			
	210	215	220
Ser Arg Leu Lys Ala Asp Ala Leu Pro Ala Pro Pro Val Phe Cys Val			
225	230	235	240
Ala Ala Leu Thr His Val Cys Leu Ser Arg Pro Val Pro Arg Arg Leu			
	245	250	255
Ser Asp Pro Lys Lys Gly Phe Pro Asp Thr Arg Thr Glu Ala Gly Gly			
	260	265	270
Leu Gly Leu Gly Glu Gly Gly Gly Pro Ala Gly Thr Phe Leu Leu Cys			
	275	280	285

&lt;210&gt; 3748

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3748

Met Val Ser Val Phe Arg Ser Cys Asp Leu Pro Thr Leu Ala Ser Gln  
1 5 10 15  
Arg Ala Gly Ile Ile Gly Val Ser His Cys Ala Arg Pro Thr Val Arg  
20 25 30  
Phe Phe Leu Phe Leu Phe Phe Phe Phe Glu Met Glu Ser Ser Ser Val  
35 40 45  
Thr Arg Leu Glu Cys Ser Asp Val Ile Ser Ala His His Asn Leu Arg  
50 55 60  
Pro Pro Gly Ser Ser Asp Ser Pro Ala Leu Asp Ser Gln Val Ala Arg  
65 70 75 80  
Ile Thr Gly Met Arg His His Thr Gln Leu Ile Phe Val Phe Leu Val  
85 90 95  
Glu Thr Gly Phe His His Ile Gly Gln Asp Gly Leu His Leu Leu Thr  
100 105 110  
Ser

&lt;210&gt; 3749

&lt;211&gt; 1445

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3749

Met Gly Asn Leu Val Ile Pro Leu Gly Lys Gly Arg Ala Gly Arg Val

1 5 10 15

Glu Ser Gly Gln Arg Ile Pro Pro Pro Ala Pro Arg Pro Ser Val Glu

20 25 30

Cys Thr Gly Asp Asp Ile Ala Leu Gln Met Glu Lys Met Leu Phe Pro

35 40 45

Leu Lys Ser Pro Ser Ala Thr Trp Leu Ser Pro Ser Ser Thr Pro Trp

50 55 60

Met Met Asp Phe Ile Leu Thr Ser Val Cys Gly Leu Val Leu Leu Phe

65 70 75 80

Leu Leu Leu Leu Tyr Val His Ser Asp Pro Pro Ser Pro Pro Pro Gly

85 90 95

Arg Lys Arg Ser Ser Arg Glu Pro Gln Arg Glu Arg Ser Gly Arg Ser

100 105 110

Arg Ser Arg Lys Ile Ser Ala Leu Lys Ala Cys Arg Ile Leu Leu Arg

115 120 125

Glu Leu Glu Glu Thr Arg Asp Leu Asn Tyr Leu Leu Glu Ser His Leu

130 135 140

Arg Lys Leu Ala Gly Glu Gly Ser Ser His Leu Pro Leu Gly Gly Asp

145 150 155 160

Pro Leu Gly Asp Val Cys Lys Pro Val Pro Ala Lys Ala His Gln Pro

165 170 175

His Gly Lys Cys Met Gln Asp Pro Ser Pro Ala Ser Leu Ser Pro Pro

180 185 190

Ala Pro Pro Ala Pro Leu Ala Ser Thr Leu Ser Pro Gly Pro Met Thr

195 200 205

Phe Ser Glu Pro Phe Gly Pro His Ser Thr Leu Ser Ala Ser Gly Pro

210 215 220



出証特 2 0 0 4 - 3 0 5 9 6 6 0

450                                      455                                      460  
Asn Ala His Ser Val Pro Leu Asp Lys Ala Ser Thr Ser Leu Pro Gly  
465                                      470                                      475                                      480  
Glu Pro Glu Val Glu Ala Ser Ser Gln Leu Ser Gln Ala Pro Pro Gln  
   485                                      490                                      495  
Pro His His Met Ala Gln Pro Gln His Phe Thr Pro Ala Trp Pro Gln  
   500                                      505                                      510  
Ser Gln Pro Pro Pro Leu Ala Glu Ile Gln Thr Gln Ala His Leu Ser  
   515                                      520                                      525  
Pro Pro Val Pro Ser Leu Gly Cys Ser Ser Pro Pro Gln Ile Arg Gly  
   530                                      535                                      540  
Cys Gly Ala Ser Tyr Pro Thr Ser Gln Glu Arg Thr Gln Ser Val Ile  
545                                      550                                      555                                      560  
Pro Thr Gly Lys Glu Tyr Leu Glu Trp Pro Leu Lys Lys Arg Pro Lys  
   565                                      570                                      575  
Trp Lys Arg Val Leu Pro Ser Leu Leu Lys Lys Ser Gln Ala Val Leu  
   580                                      585                                      590  
Ser Gln Pro Thr Ala His Leu Pro Gln Glu Arg Pro Ala Ser Trp Ser  
   595                                      600                                      605  
Pro Lys Ser Ala Pro Ile Leu Pro Gly Val Val Thr Ser Pro Glu Leu  
   610                                      615                                      620  
Pro Glu His Trp Trp Gln Gly Arg Asn Ala Ile His Gln Glu Gln Ser  
625                                      630                                      635                                      640  
Cys Gly Pro Pro Ser Arg Leu Gln Ala Ser Gly Asp Leu Leu Gln Pro  
   645                                      650                                      655  
Asp Gly Glu Phe Pro Gly Arg Pro Gln Ser Gln Ala Glu Asp Thr Gln  
   660                                      665                                      670  
Gln Ala Leu Leu Pro Ser Gln Pro Ser Glu Phe Ala Gly Lys Gly Arg  
   675                                      680                                      685

Lys Asp Val Gln Lys Thr Gly Phe Arg Ser Ser Gly Arg Phe Ser Asp  
 690 695 700  
 Lys Gly Cys Leu Gly Ser Lys Leu Gly Pro Asp Pro Ser Arg Asp Gln  
 705 710 715 720  
 Gly Ser Gly Arg Thr Ser Val Lys Ala Leu Asp Glu Asp Lys Glu Ala  
 725 730 735  
 Glu Gly Asp Leu Arg Arg Ser Trp Lys Tyr Gln Ser Val Ser Ser Thr  
 740 745 750  
 Pro Arg Asp Pro Asp Lys Glu His Leu Glu Asn Lys Leu Gln Ile His  
 755 760 765  
 Leu Ala Arg Lys Val Gly Glu Ile Lys Glu Gly Trp Ile Pro Met Pro  
 770 775 780  
 Val Arg Arg Ser Trp Leu Met Ala Lys Cys Ala Val Pro Lys Ser Asp  
 785 790 795 800  
 Thr His Arg Lys Pro Glu Lys Leu Ala Ser Trp Arg Gly Gly Lys Ala  
 805 810 815  
 His Val Asn Thr Ser Gln Glu Leu Ser Phe Leu His Pro Cys Thr Gln  
 820 825 830  
 Gln Ile Leu Glu Val His Leu Val Arg Phe Cys Val Arg His Ser Trp  
 835 840 845  
 Gly Thr Asp Leu Gln Ser Leu Glu Pro Ile Asn Val Trp Ser Gly Glu  
 850 855 860  
 Ala Gln Ala Pro Pro Phe Pro Gln Ser Thr Phe Thr Pro Trp Ala Ser  
 865 870 875 880  
 Trp Val Ser Arg Val Glu Ser Val Pro Lys Val Pro Ile Phe Leu Gly  
 885 890 895  
 Lys Arg Pro Gln Ser Gly Pro Gly Asp Asn Arg Thr Thr Ser Lys Ser  
 900 905 910  
 Val Pro Thr Val Ser Gly Pro Leu Ala Ala Pro Pro Pro Glu Gln Glu

915 920 925  
Gly Val Gln Arg Pro Pro Arg Gly Ser Gln Ser Ala Asp Thr His Gly  
930 935 940  
Arg Ser Glu Ala Phe Pro Thr Gly His Lys Gly Arg Gly Cys Ser Gln  
945 950 955 960  
Pro Pro Thr Cys Ser Leu Val Gly Arg Thr Trp Gln Ser Arg Thr Val  
965 970 975  
Leu Glu Ser Gly Lys Pro Lys Pro Arg Leu Glu Gly Ser Met Gly Ser  
980 985 990  
Glu Met Ala Gly Asn Glu Ala Trp Leu Glu Ser Glu Ser Met Ser Pro  
995 1000 1005  
Gly Asp Pro Cys Ser Ser Arg Ala Leu Gln Glu Leu Ser Ile Gly Ser  
1010 1015 1020  
Gln Trp Ala Arg Ala Glu Asp Ala Leu Gln Ala Leu Lys Val Gly Glu  
1025 1030 1035 1040  
Lys Pro Pro Thr Trp Glu Val Thr Leu Gly Ala Ser Val Arg Ala Ser  
1045 1050 1055  
Ser Gly Ser Val Gln Glu Asp Leu Arg Ser Thr Gly Ala Leu Gly Thr  
1060 1065 1070  
Thr Gly Asn Pro Ser Ala Ser Ser Val Cys Val Ala Gln Asp Pro Glu  
1075 1080 1085  
Gln Leu His Leu Lys Ala Gln Val Val Ser Glu Ile Ala Leu Ile Val  
1090 1095 1100  
Gln Val Asp Ser Glu Glu Gln Leu Pro Gly Arg Ala Pro Gly Ile Leu  
1105 1110 1115 1120  
Leu Gln Asp Gly Ala Thr Gly Leu Cys Leu Pro Gly Arg His Met Asp  
1125 1130 1135  
Met Leu Thr Ala Ala Asp Arg Leu Pro Thr Gln Ala Pro Leu Ser Thr  
1140 1145 1150

Ser Gln Ser Val Ser Gly Lys Asn Met Thr Ala Ser Gln Gly Pro Cys  
1155 1160 1165  
Ala Leu Leu Trp Lys Gly Gly Asp Ser Pro Gly Gln Gln Glu Pro Gly  
1170 1175 1180  
Ser Pro Lys Ala Lys Ala Pro Gln Lys Ser Gln Lys Thr Leu Gly Cys  
1185 1190 1195 1200  
Ala Gly Lys Gly Glu Ala His Arg Arg Pro Arg Thr Gly Glu Gln Gly  
1205 1210 1215  
His Arg Ser Lys Gly Pro Arg Thr Ser Glu Ala Ser Gly Arg Ser His  
1220 1225 1230  
Pro Ala Gln Ala Arg Glu Ile Gly Asp Lys Gln Glu Arg Lys Tyr Asn  
1235 1240 1245  
Gln Leu Gln Leu Glu Lys Gly Gln Thr Pro Pro Glu Ser His Phe Gln  
1250 1255 1260  
Arg Lys Ile Ser His His Pro Gln Gly Leu His Pro Arg Lys Gly Gly  
1265 1270 1275 1280  
Thr Arg Trp Glu Asp Val Leu Gln Lys Gly Lys Pro Gly Ala Asp Ala  
1285 1290 1295  
Phe Gln Ser Trp Gly Ser Gly Pro Pro Arg Gln Phe Met Asp Cys Met  
1300 1305 1310  
Ala Asp Lys Ala Trp Thr Ile Ser Arg Val Val Gly Gln Ile Leu Val  
1315 1320 1325  
Asp Lys Leu Gly Leu Gln Trp Gly Arg Gly Pro Ser Glu Val Asn Arg  
1330 1335 1340  
His Lys Gly Asp Phe His Ala Gln Glu Asn Val Pro Ser Cys Cys His  
1345 1350 1355 1360  
Arg Gly His Cys His Gln Glu Arg Ser Arg Glu Met Arg Ala Leu Ala  
1365 1370 1375  
Cys Ser Pro Lys Ala Thr Pro Lys Gly His His Cys Pro Val Lys Asn

1380                      1385                      1390  
 Arg Gly Ile Arg Asp Arg Asp Ser Ser Trp Ala Pro Pro Pro Arg Glu  
 1395                      1400                      1405  
 Pro Val Ser Pro Ala Gly Pro His His His Arg Pro Arg Met Ala Ser  
 1410                      1415                      1420  
 Thr Ser Gly Gly Pro His Pro Gln Leu Gln Glu Leu Met Ser Ala Gln  
 1425                      1430                      1435                      1440  
 Arg Cys Leu Ala Ser  
 1445

<210> 3750

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3750

Met Gln Leu Leu Ala Gly Val Lys Leu Cys Thr Gly Arg Thr Leu Thr  
 1                      5                      10                      15  
 Asn His Pro His Tyr Glu Asp Ser Ser Leu Arg Glu Arg Thr Arg Ala  
 20                      25                      30  
 Val Tyr Gln Ile Tyr Ala Lys Arg Ala Pro Glu Glu Val His Ala Leu  
 35                      40                      45  
 Leu Arg Ser Phe Gly Thr Asp Tyr Val Ile Leu Glu Asp Ser Ile Cys  
 50                      55                      60  
 Tyr Glu Arg Arg His Arg Arg Gly Cys Arg Leu Arg Asp Leu Leu Asp  
 65                      70                      75                      80  
 Ile Ala Asn Gly His Met Met Asp Gly Pro Gly Glu Asn Asp Pro Asp  
 85                      90                      95

Leu Lys Pro Ala Asp His Pro Arg Phe Cys Glu Glu Ile Lys Arg Asn  
                     100                    105                    110  
 Leu Pro Pro Tyr Val Ala Tyr Phe Thr Arg Val Phe Gln Asn Lys Thr  
                     115                    120                    125  
 Phe His Val Tyr Lys Leu Ser Arg Asn Lys  
                     130                    135

<210> 3751

<211> 917

<212> PRT

<213> Homo sapiens

<400> 3751

Met Glu Asn Ile Leu Cys Phe Leu Asn Ser Tyr Thr Glu Thr Val Leu  
     1                    5                    10                    15  
 Ser Pro Asp Ser His Cys Leu Asp Ile Asp Leu Asn Phe Ile Cys Leu  
                     20                    25                    30  
 Ser Gly Leu Gly Leu Phe Ile Leu Tyr Leu Phe Tyr Met Val Leu Thr  
                     35                    40                    45  
 Leu Tyr Ser Ser Pro Thr Glu Lys Asn Asn Asp Thr Gln Lys His Gln  
                     50                    55                    60  
 Gly Arg Ala Arg Arg Lys Arg Lys Ser Val Thr Phe Lys Asp Arg Lys  
     65                    70                    75                    80  
 Ser Leu Gln Lys Glu Ala Glu Glu Glu Arg Lys Leu His Ser Phe Leu  
                     85                    90                    95  
 Lys Ser Phe Gly Pro Pro Val Ser Cys Ser Pro Leu Gly Gln His His  
                     100                    105                    110  
 Asp Thr Thr Leu Phe Arg Arg Leu Leu Cys Pro Asp Pro Val Cys Arg

115 120 125  
Val Cys Asn Arg Ala Thr Ala Asp Ile Gln Arg Leu Leu Ser Trp Glu  
130 135 140  
Ser Leu Lys Asp Ala Ala Pro Ser Val Ser Pro Leu Ala Ser Ser Ala  
145 150 155 160  
Ser Gly Ala Glu Ser Ser Phe Thr Leu Ala Ser Thr Pro Ser Ala Thr  
165 170 175  
Thr Pro Glu Asp Leu Ile Leu Ser Ser Arg Pro Lys Pro Ser Pro Pro  
180 185 190  
Pro Pro Leu Ile Leu Ser Pro Asp Leu Ile Thr Thr Leu Ala Asp Leu  
195 200 205  
Phe Ser Pro Ser Pro Leu Arg Asp Pro Leu Pro Pro Gln Pro Val Ser  
210 215 220  
Pro Leu Asp Ser Lys Phe Pro Ile Asp His Ser Pro Pro Gln Gln Leu  
225 230 235 240  
Pro Phe Pro Leu Leu Pro Pro His His Ile Glu Arg Val Glu Pro Ser  
245 250 255  
Leu Gln Pro Glu Ala Ser Leu Ser Leu Asn Thr Ile Phe Ser Phe Gly  
260 265 270  
Ser Thr Leu Cys Gln Asp Ile Ser Gln Ala Val Asn Arg Thr Asp Ser  
275 280 285  
Cys Ala Arg His His Gly Pro Pro Thr Pro Ser Ala Leu Pro Pro Glu  
290 295 300  
Asp Cys Thr Val Thr Gln Ser Lys Ser Asn Leu Thr Val Leu Lys Thr  
305 310 315 320  
Phe Pro Glu Met Leu Ser Leu Gly Gly Ser Gly Gly Ser Ser Thr Ser  
325 330 335  
Ala Pro Thr Thr Lys Gly Ile Asp His Ser Cys Pro Ala Ser Ser Glu  
340 345 350



Phe Ser Trp Trp Gln Pro His Ala Lys Asp Ser Phe Ser Ser Asn Phe  
 355 360 365  
 Val Pro Ser Asp Phe Met Glu Glu Leu Leu Thr Leu His Ser Ser Glu  
 370 375 380  
 Ala Ser Leu Gly Gly His Ser Val Ala Asn Ile Ile Gln Pro Val Asn  
 385 390 395 400  
 Ile Ser Phe Leu Ser His Asp Ile Pro Ala Leu Leu Glu Arg Gln Val  
 405 410 415  
 Lys Arg Arg Gly Asp Phe Leu Met Trp Lys Glu Asn Gly Lys Lys Pro  
 420 425 430  
 Gly Ser Phe Pro Thr Gln Leu Arg Pro Asn Tyr Gln Leu Asn Ser Ser  
 435 440 445  
 Arg Asn Met Leu Thr Ser Thr Ala Val Lys His Asp Leu Ala Glu Ser  
 450 455 460  
 Phe Pro Phe Trp Ala Ser Lys Gly Lys Leu Glu Trp Gln His Ile His  
 465 470 475 480  
 Gln Gln Pro Pro Tyr Ser Lys Cys Phe Glu Asp His Leu Glu Gln Lys  
 485 490 495  
 Tyr Val Gln Leu Phe Trp Gly Leu Pro Ser Leu His Ser Glu Ser Leu  
 500 505 510  
 His Pro Thr Val Phe Val Gln His Gly Arg Ser Ser Met Phe Val Phe  
 515 520 525  
 Phe Asn Gly Ile Thr Asn Thr Ser Met Ser His Glu Ser Pro Val Leu  
 530 535 540  
 Pro Pro Pro Gln Pro Leu Phe Leu Pro Ser Thr Gln Pro Leu Pro Leu  
 545 550 555 560  
 Pro Gln Thr Leu Pro Arg Gly Gln Ser Leu His Leu Thr Gln Val Lys  
 565 570 575  
 Ser Leu Ala Gln Pro Gln Ser Pro Phe Pro Ala Leu Pro Pro Ser Pro

580 585 590  
Leu Phe Leu Ile Arg Val Cys Gly Val Cys Phe His Arg Pro Gln Asn  
595 600 605  
Glu Ala Arg Ser Leu Met Pro Ser Glu Ile Asn His Leu Glu Trp Asn  
610 615 620  
Val Leu Gln Lys Val Gln Glu Ser Val Trp Gly Leu Pro Ser Val Val  
625 630 635 640  
Gln Lys Ser Gln Glu Asp Phe Cys Pro Pro Ala Pro Asn Pro Val Leu  
645 650 655  
Val Arg Lys Ser Phe Lys Val His Val Pro Ile Ser Ile Ile Pro Gly  
660 665 670  
Asp Phe Pro Leu Ser Ser Glu Val Arg Lys Lys Leu Glu Gln His Ile  
675 680 685  
Arg Arg Arg Leu Ile Gln Arg Arg Trp Gly Leu Pro Arg Arg Ile His  
690 695 700  
Glu Ser Leu Ser Leu Leu Arg Pro Gln Asn Lys Ile Ser Glu Leu Ser  
705 710 715 720  
Val Ser Glu Ser Ile His Gly Pro Leu Asn Ile Ser Leu Val Glu Gly  
725 730 735  
Gln Arg Cys Asn Val Leu Lys Lys Ser Ala Ser Ser Phe Pro Arg Ser  
740 745 750  
Phe His Glu Arg Ser Ser Asn Met Leu Ser Met Glu Asn Val Gly Asn  
755 760 765  
Tyr Gln Gly Cys Ser Gln Glu Thr Ala Pro Lys Asn His Leu Leu His  
770 775 780  
Asp Pro Glu Thr Ser Ser Glu Glu Asp Leu Arg Ser Asn Ser Glu Arg  
785 790 795 800  
Asp Leu Gly Thr His Met Met His Leu Ser Gly Asn Asp Ser Gly Val  
805 810 815

Arg Leu Gly Gln Lys Gln Leu Glu Asn Ala Leu Thr Val His Leu Ser

820

825

830

Lys Lys Phe Glu Glu Ile Asn Glu Gly Arg Met Pro Gly Thr Val His

835

840

845

Ser Ser Trp His Ser Val Lys Gln Thr Ile Cys Leu Pro Glu Lys Ser

850

855

860

His Ser Gln Ile Lys His Arg Asn Leu Ala Ala Leu Val Ser Glu Asp

865

870

875

880

His Gly Val Asp Thr Ser Gln Glu Met Ser Phe Leu Ser Ser Asn Lys

885

890

895

Gln Lys Met Leu Glu Ala His Ile Lys Ser Phe His Met Lys Pro Ile

900

905

910

Leu Asn Leu Ser Ile

915

<210> 3752

<211> 1318

<212> PRT

<213> Homo sapiens

<400> 3752

Met Asp Arg Gln Cys Ser Glu Lys Pro His Ser Cys Thr Pro Thr Gly

1

5

10

15

Arg Val Ser Ser Ala Val Ser Gln Asn Ser Arg Ile Ser Pro Pro Val

20

25

30

Ser Thr Ser Met Lys Asp Ser Ser Cys Met Glu Val His Gln Asp Ser

35

40

45

Ala Arg Arg Asp Arg Trp Ser His Pro Thr Thr Ile Leu Leu His Lys

50	55	60
Ser Gln Ser Ser Gln Ala Thr Leu Met Pro Gln Glu His Arg Met Phe		
65	70	75
Met Gly Glu Ala Tyr Ser Ala Ala Thr Cys Phe Lys Met Leu Gln Asp		
85	90	95
Met Asn Ser Ala Asp Pro Phe His Leu Lys Tyr Ile Ile Lys Lys Ile		
100	105	110
Lys Asn Met Ala His Gly Ser Pro Lys Leu Val Met Glu Thr Ile His		
115	120	125
Asp Tyr Phe Ile Asp Asn Pro Glu Ile Ser Ser Arg His Lys Phe Arg		
130	135	140
Leu Phe Gln Thr Leu Glu Met Val Ile Gly Ala Ser Asp Val Leu Glu		
145	150	155
Glu Thr Trp Glu Lys Thr Phe Thr Arg Leu Ala Leu Glu Asn Met Thr		
165	170	175
Lys Ala Thr Glu Leu Glu Asp Ile Tyr Gln Asp Ala Ala Ser Asn Met		
180	185	190
Leu Val Ala Ile Cys Arg His Ser Trp Arg Val Val Ala Gln His Leu		
195	200	205
Glu Thr Glu Leu Leu Thr Gly Val Phe Pro His Arg Ser Leu Leu Tyr		
210	215	220
Val Met Gly Val Leu Ser Ser Ser Glu Glu Leu Phe Ser Gln Glu Asp		
225	230	235
Lys Ala Cys Trp Glu Glu Gln Leu Ile Gln Met Ala Ile Lys Ser Val		
245	250	255
Pro Phe Leu Ser Thr Asp Val Trp Ser Lys Glu Leu Leu Trp Thr Leu		
260	265	270
Thr Thr Pro Ser Trp Thr Gln Gln Glu Gln Ser Pro Glu Lys Ala Phe		
275	280	285

Met Phe Thr Tyr Tyr Gly Leu Ile Leu Gln Ala Glu Lys Asn Gly Ala  
 290 295 300  
 Thr Val Arg Arg His Leu Gln Ala Leu Leu Glu Thr Ser His Gln Trp  
 305 310 315 320  
 Pro Lys Gln Arg Glu Gly Met Ala Leu Thr Ser Gly Leu Ala Ala Thr  
 325 330 335  
 Arg His Leu Asp Asp Val Trp Ala Val Leu Asp Gln Phe Gly Arg Ser  
 340 345 350  
 Arg Pro Ile Arg Trp Ser Leu Pro Ser Ser Ser Pro Lys Asn Ser Glu  
 355 360 365  
 Asp Leu Arg Trp Lys Trp Ala Ser Ser Thr Ile Leu Leu Ala Tyr Gly  
 370 375 380  
 Gln Val Ala Ala Lys Ala Arg Ala His Ile Leu Pro Trp Val Asp Asn  
 385 390 395 400  
 Ile Val Ser Arg Met Val Phe Tyr Phe His Tyr Ser Ser Trp Asp Glu  
 405 410 415  
 Thr Leu Lys Gln Ser Phe Leu Thr Ala Thr Leu Met Leu Met Gly Ala  
 420 425 430  
 Val Ser Arg Ser Glu Gly Ala His Ser Tyr Glu Phe Phe Gln Thr Ser  
 435 440 445  
 Glu Leu Leu Gln Cys Leu Met Val Leu Met Glu Lys Glu Pro Gln Asp  
 450 455 460  
 Thr Leu Cys Thr Arg Ser Arg Gln Gln Ala Met His Ile Ala Ser Ser  
 465 470 475 480  
 Leu Cys Lys Leu Arg Pro Pro Ile Asp Leu Glu Arg Lys Ser Gln Leu  
 485 490 495  
 Leu Ser Thr Cys Phe Arg Ser Val Phe Ala Leu Pro Leu Leu Asp Ala  
 500 505 510  
 Leu Glu Lys His Thr Cys Leu Phe Leu Glu Pro Pro Asn Ile Gln Leu

515                      520                      525  
Trp Pro Val Ala Arg Glu Arg Ala Gly Trp Thr His Gln Gly Trp Gly  
530                      535                      540  
Pro Arg Ala Val Leu His Cys Ser Glu His Leu Gln Ser Leu Tyr Ser  
545                      550                      555                      560  
Arg Thr Met Glu Ala Leu Asp Phe Met Leu Gln Ser Leu Ile Met Gln  
565                      570                      575  
Asn Pro Thr Ala Asp Glu Leu His Phe Leu Leu Ser His Leu Tyr Ile  
580                      585                      590  
Trp Leu Ala Ser Glu Lys Ala His Glu Arg Gln Arg Ala Val His Ser  
595                      600                      605  
Cys Met Ile Leu Leu Lys Phe Leu Asn His Asn Gly Tyr Leu Asp Pro  
610                      615                      620  
Lys Glu Asp Phe Lys Arg Ile Gly Gln Leu Val Gly Ile Leu Gly Met  
625                      630                      635                      640  
Leu Cys Gln Asp Pro Asp Arg Ala Thr Gln Arg Cys Ser Leu Glu Gly  
645                      650                      655  
Ala Ser His Leu Tyr Gln Leu Leu Met Cys His Lys Thr Gly Glu Ala  
660                      665                      670  
Leu Gln Ala Glu Ser Gln Ala Pro Lys Glu Leu Ser Gln Ala His Ser  
675                      680                      685  
Asp Gly Ala Pro Leu Trp Asn Ser Arg Asp Gln Lys Ala Thr Pro Leu  
690                      695                      700  
Gly Pro Gln Glu Met Ala Lys Asn His Ile Phe Gln Leu Cys Ser Phe  
705                      710                      715                      720  
Gln Val Ile Lys Asn Ile Met Gln Gln Leu Thr Leu Ala Glu Leu Ser  
725                      730                      735  
Asp Leu Ile Trp Thr Ala Ile Asp Gly Leu Gly Ser Thr Ser Pro Phe  
740                      745                      750

Arg Val Gln Ala Ala Ser Glu Met Leu Leu Thr Ala Val Gln Glu His  
755 760 765  
Gly Ala Lys Leu Glu Ile Val Ser Ser Met Ala Gln Ala Ile Arg Leu  
770 775 780  
Arg Leu Cys Ser Val His Ile Pro Gln Ala Lys Glu Lys Thr Leu His  
785 790 795 800  
Ala Ile Thr Leu Leu Ala Arg Ser His Thr Cys Glu Leu Val Ala Thr  
805 810 815  
Phe Leu Asn Ile Ser Ile Pro Leu Asp Ser His Thr Phe Gln Leu Trp  
820 825 830  
Arg Ala Leu Gly Ala Glu Gln Pro Thr Ser His Leu Val Leu Thr Thr  
835 840 845  
Leu Leu Ala Cys Leu Gln Glu Arg Pro Leu Pro Thr Gly Ala Ser Asp  
850 855 860  
Ser Ser Pro Cys Pro Lys Glu Lys Thr Tyr Leu Arg Leu Leu Ala Ala  
865 870 875 880  
Met Asn Met Leu His Glu Leu Gln Phe Ala Arg Glu Phe Lys Gln Ala  
885 890 895  
Val Gln Glu Gly Tyr Pro Lys Leu Phe Leu Ala Leu Leu Thr Gln Met  
900 905 910  
His Tyr Val Leu Glu Leu Asn Leu Pro Ser Glu Pro Gln Pro Lys Gln  
915 920 925  
Gln Ala Gln Glu Ala Ala Val Pro Ser Pro Gln Ser Cys Ser Thr Ser  
930 935 940  
Leu Glu Ala Leu Lys Ser Leu Leu Ser Thr Thr Gly His Trp His Asp  
945 950 955 960  
Phe Ala His Leu Glu Leu Gln Gly Ser Trp Glu Leu Phe Thr Thr Ile  
965 970 975  
His Thr Tyr Pro Lys Gly Val Gly Pro Leu Ala Arg Ala Met Val Gln

980	985	990	
Asn His Cys Arg Gln Ile Pro Ala Val Leu Arg Gln Leu Leu Pro Ser			
995	1000	1005	
Leu Gln Ser Pro Gln Glu Arg Glu Arg Lys Val Ala Ile Leu Ile Leu			
1010	1015	1020	
Thr Lys Phe Leu Tyr Ser Pro Val Leu Leu Glu Val Leu Pro Lys Gln			
1025	1030	1035	1040
Ala Ala Leu Thr Val Leu Ala Gln Gly Leu His Asp Pro Ser Pro Glu			
1045	1050	1055	
Val Arg Val Leu Ser Leu Gln Gly Leu Ser Asn Ile Leu Phe His Pro			
1060	1065	1070	
Asp Lys Gly Ser Leu Leu Gln Gly Gln Leu Arg Pro Leu Leu Asp Ser			
1075	1080	1085	
Phe Phe Gln Ser Ser Asp Gln Val Ile Val Cys Ile Met Gly Thr Val			
1090	1095	1100	
Ser Asp Thr Leu His Arg Leu Gly Ala Gln Gly Thr Gly Ser Gln Ser			
1105	1110	1115	1120
Leu Gly Val Ala Ile Ser Thr Arg Ser Phe Phe Asn Asp Glu Arg Asp			
1125	1130	1135	
Gly Ile Arg Ala Ala Ala Met Ala Leu Phe Gly Asp Leu Val Ala Ala			
1140	1145	1150	
Met Ala Asp Arg Glu Leu Ser Gly Leu Arg Thr Gln Val His Gln Ser			
1155	1160	1165	
Met Val Pro Leu Leu Leu His Leu Lys Asp Gln Cys Pro Ala Val Ala			
1170	1175	1180	
Thr Gln Ala Lys Phe Thr Phe Tyr Arg Cys Ala Val Leu Leu Arg Trp			
1185	1190	1195	1200
Arg Leu Leu His Thr Leu Phe Cys Thr Leu Ala Trp Glu Arg Gly Leu			
1205	1210	1215	



Ser Ala Arg His Phe Leu Trp Thr Cys Leu Met Thr Arg Ser Gln Glu

1220

1225

1230

Glu Phe Ser Ile His Leu Ser Gln Ala Leu Ser Tyr Leu His Ser His

1235

1240

1245

Ser Cys His Ile Lys Thr Trp Val Thr Leu Phe Ile Gly His Thr Ile

1250

1255

1260

Cys Tyr His Pro Gln Ala Val Phe Gln Met Leu Asn Ala Val Asp Thr

1265

1270

1275

1280

Asn Leu Leu Phe Arg Thr Phe Glu His Leu Arg Ser Asp Pro Glu Pro

1285

1290

1295

Ser Ile Arg Glu Phe Ala Thr Ser Gln Leu Ser Phe Leu Gln Lys Val

1300

1305

1310

Ser Ala Arg Pro Lys Gln

1315

<210> 3753

<211> 240

<212> PRT

<213> Homo sapiens

<400> 3753

Met Pro Pro Ala Pro Ala Ser Pro Pro Leu Ser Leu Pro Gly Arg Asp

1

5

10

15

Gly Arg Arg Leu Cys Leu Pro Leu Pro Asp Leu Pro Cys Pro Gly Glu

20

25

30

Val Asp Thr Lys His Val Leu Gly Asn Leu Leu Pro Thr His Gly Ala

35

40

45

Val Gln Ala Ala Ala Ser Gln Pro Trp Ser Leu Leu Gly Val His Ser

出証特 2 0 0 4 - 3 0 5 9 6 6 0

&lt;400&gt; 3754

Met Trp Ser Leu Pro Gly Gly Leu Leu Ser Gly Leu Ala Thr His Pro  
 1 5 10 15  
 Trp Gln His Cys Pro Ile Ser Gly Leu Asp Phe Leu Arg Ser Cys Arg  
 20 25 30  
 Gly His Ser Leu Gln Pro Arg Arg Gly Ser Pro Leu Val Gln Pro Lys  
 35 40 45  
 Leu Ser Met Gly Leu Glu His Pro Cys Gln Pro Cys Ala Pro Ser Thr  
 50 55 60  
 Pro Arg Ser Arg Phe Ser Ser Val Ser Gln Gln Arg Gly Ser Val Leu  
 65 70 75 80  
 Pro Ser Leu Cys Val Ser Trp Ala Lys Thr Trp Gly Ala Leu Gly Gln  
 85 90 95  
 Gly Trp Cys Phe Pro Gln Ala His Leu Gly Arg Gly Leu Ala Pro Ser  
 100 105 110  
 Leu Ala Gln Val Leu Ser Ser Ala Leu Val Ala Leu Glu  
 115 120 125

&lt;210&gt; 3755

&lt;211&gt; 890

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3755

Met Met Met Val Met Gln Pro Glu Gly Leu Gly Ala Gly Glu Gly Arg  
 1 5 10 15  
 Phe Ala Gly Gly Gly Gly Gly Gly Glu Tyr Met Glu Gln Glu Glu Asp

20	25	30	
Trp Asp Arg Asp Leu Leu Leu Asp Pro Ala Trp Cys Asn Ser His Leu			
35	40	45	
Arg Lys Ala Gly Thr Gln Ile Glu Asn Ile Glu Glu Asp Phe Arg Asn			
50	55	60	
Gly Leu Lys Leu Met Leu Leu Leu Glu Val Ile Ser Gly Glu Arg Leu			
65	70	75	80
Pro Arg Pro Asp Lys Gly Lys Met Arg Phe His Lys Ile Ala Asn Val			
85	90	95	
Asn Lys Ala Leu Asp Phe Ile Ala Ser Lys Gly Val Lys Leu Val Ser			
100	105	110	
Ile Gly Ala Glu Glu Ile Val Asp Gly Asn Leu Lys Met Thr Leu Gly			
115	120	125	
Met Ile Trp Thr Ile Ile Leu Arg Phe Ala Ile Gln Asp Ile Ser Val			
130	135	140	
Glu Glu Thr Ser Ala Lys Glu Gly Leu Leu Leu Trp Cys Gln Arg Lys			
145	150	155	160
Thr Ala Pro Tyr Arg Asn Val Asn Val Gln Asn Phe His Thr Ser Trp			
165	170	175	
Lys Asp Gly Leu Ala Leu Cys Ala Leu Ile His Arg His Arg Pro Asp			
180	185	190	
Leu Ile Asp Tyr Ala Lys Leu Arg Lys Asp Asp Pro Ile Gly Asn Leu			
195	200	205	
Asn Thr Ala Phe Glu Val Ala Glu Lys Tyr Leu Asp Ile Pro Lys Met			
210	215	220	
Leu Asp Ala Glu Asp Ile Val Asn Thr Pro Lys Pro Asp Glu Lys Ala			
225	230	235	240
Ile Met Thr Tyr Val Ser Cys Phe Tyr His Ala Phe Ala Gly Ala Glu			
245	250	255	

Gln Ala Glu Thr Ala Ala Asn Arg Ile Cys Lys Val Leu Ala Val Asn  
260 265 270  
Gln Glu Asn Glu Lys Leu Met Glu Glu Tyr Glu Lys Leu Ala Ser Glu  
275 280 285  
Leu Leu Glu Trp Ile Arg Arg Thr Val Pro Trp Leu Glu Asn Arg Val  
290 295 300  
Gly Glu Pro Ser Met Ser Ala Met Gln Arg Lys Leu Glu Asp Phe Arg  
305 310 315 320  
Asp Tyr Arg Arg Leu His Lys Pro Pro Arg Ile Gln Glu Lys Cys Gln  
325 330 335  
Leu Glu Ile Asn Phe Asn Thr Leu Gln Thr Lys Leu Arg Leu Ser His  
340 345 350  
Arg Pro Ala Phe Met Pro Ser Glu Gly Lys Leu Val Ser Asp Ile Ala  
355 360 365  
Asn Ala Trp Arg Gly Leu Glu Gln Val Glu Lys Gly Tyr Glu Asp Trp  
370 375 380  
Leu Leu Ser Glu Ile Arg Arg Leu Gln Arg Leu Gln His Leu Ala Glu  
385 390 395 400  
Lys Phe Arg Gln Lys Ala Ser Leu His Glu Ala Trp Thr Arg Gly Lys  
405 410 415  
Glu Glu Met Leu Ser Gln Arg Asp Tyr Asp Ser Ala Leu Leu Gln Glu  
420 425 430  
Val Arg Ala Leu Leu Arg Arg His Glu Ala Phe Glu Ser Asp Leu Ala  
435 440 445  
Ala His Gln Asp Arg Val Glu His Ile Ala Ala Leu Ala Gln Glu Leu  
450 455 460  
Asn Glu Leu Asp Tyr His Glu Ala Ala Ser Val Asn Ser Arg Cys Gln  
465 470 475 480  
Ala Ile Cys Asp Gln Trp Asp Asn Leu Gly Thr Leu Thr Gln Lys Arg

485	490	495
Arg Asp Ala Leu Glu Arg Met Glu Lys Leu Leu Glu Thr Ile Asp Gln		
500	505	510
Leu Gln Leu Glu Phe Ala Arg Arg Ala Ala Pro Phe Asn Asn Trp Leu		
515	520	525
Asp Gly Ala Val Glu Asp Leu Gln Asp Val Trp Leu Val His Ser Val		
530	535	540
Glu Glu Thr Gln Ser Leu Leu Thr Ala His Asp Gln Phe Lys Ala Thr		
545	550	555
Leu Pro Glu Ala Asp Arg Glu Arg Gly Ala Ile Met Gly Ile Gln Gly		
565	570	575
Glu Ile Gln Lys Ile Cys Gln Thr Tyr Gly Leu Arg Pro Cys Ser Thr		
580	585	590
Asn Pro Tyr Ile Thr Leu Ser Pro Gln Asp Ile Asn Thr Lys Trp Asp		
595	600	605
Met Val Arg Lys Leu Val Pro Ser Arg Asp Gln Thr Leu Gln Glu Glu		
610	615	620
Leu Ala Arg Gln Gln Val Asn Glu Arg Leu Arg Arg Gln Phe Ala Ala		
625	630	635
Gln Ala Asn Ala Ile Gly Pro Trp Ile Gln Ala Lys Val Glu Glu Val		
645	650	655
Gly Arg Leu Ala Ala Gly Leu Ala Gly Ser Leu Glu Glu Gln Met Ala		
660	665	670
Gly Leu Arg Gln Gln Glu Gln Asn Ile Ile Asn Tyr Lys Thr Asn Ile		
675	680	685
Asp Arg Leu Glu Gly Asp His Gln Leu Leu Gln Glu Ser Leu Val Phe		
690	695	700
Asp Ser Lys His Thr Val Tyr Ser Met Glu His Ile Arg Val Gly Trp		
705	710	715
		720

Glu Gln Leu Leu Thr Ser Ile Ala Arg Thr Ile Asn Glu Val Glu Asn  
725 730 735  
Gln Val Leu Thr Arg Asp Ala Lys Gly Leu Ser Gln Glu Gln Leu Asn  
740 745 750  
Glu Phe Arg Ala Ser Phe Asn His Phe Asp Arg Lys Arg Asn Gly Met  
755 760 765  
Met Glu Pro Asp Asp Phe Arg Ala Cys Leu Ile Ser Met Gly Tyr Asp  
770 775 780  
Leu Gly Glu Val Glu Phe Ala Arg Ile Met Thr Met Val Asp Pro Asn  
785 790 795 800  
Ala Ala Gly Val Val Thr Phe Gln Ala Phe Ile Asp Phe Met Thr Arg  
805 810 815  
Glu Thr Ala Glu Thr Asp Thr Thr Glu Gln Val Val Ala Ser Phe Lys  
820 825 830  
Ile Leu Ala Gly Asp Lys Asn Tyr Ile Thr Pro Glu Glu Leu Arg Arg  
835 840 845  
Glu Leu Pro Ala Lys Gln Ala Glu Tyr Cys Ile Arg Arg Met Val Pro  
850 855 860  
Tyr Lys Gly Ser Gly Ala Pro Ala Gly Ala Leu Asp Tyr Val Ala Phe  
865 870 875 880  
Ser Ser Ala Leu Tyr Gly Glu Ser Asp Leu  
885 890

&lt;210&gt; 3756

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3756

Met Arg Cys Pro Pro Gly Ala Ser Leu Ala Ala Ala Arg Gln Asp Leu  
 1 5 10 15  
 Pro Ala Trp Asp Tyr Ser Met Arg Gly Arg Ser Gly Trp Ser Trp Cys  
 20 25 30  
 Gly Ser Leu Ser Gln Pro Phe Leu Cys Ile Gly Ala Leu Pro Arg Arg  
 35 40 45  
 His Leu Ser Cys Lys Arg Gly Glu Cys Asp Val Asp Thr Trp Ala Pro  
 50 55 60  
 Gly Leu Ala Cys Val Ile Trp Ala Gly Pro His Lys His His Lys His  
 65 70 75 80  
 Leu Phe His His Ala Ile Asp Gly Cys Trp Ala Ala Gln Gly Cys Asp  
 85 90 95  
 Val Glu Leu Gly Asn Pro Ala Trp Glu Gly Ser Ile Pro Gly Ala Ala  
 100 105 110  
 Phe Gln Lys Lys Asn Ser Leu His Gln Glu Gly Val Ala Glu Pro Gln  
 115 120 125  
 Ser Pro Arg Asn Leu Arg Glu Ala Pro Lys Gly Gly Leu Pro Glu Asp  
 130 135 140  
 Thr His Pro Pro Tyr Leu Leu His Thr Gly Ser Ser Asn Gln Thr Val  
 145 150 155 160  
 Trp Pro Lys Gln Pro Gly Tyr Phe His Leu Ser Gln Gln Pro Trp Ala  
 165 170 175  
 Thr Leu Gly Met Val Pro Asn Met Ala Cys Ala Ala Val Thr Val Leu  
 180 185 190  
 Arg Gly Leu Ala Ser Thr Gly Ser Phe Leu Leu Asp Gly Gly Thr Gly  
 195 200 205  
 Ala Arg Ile Tyr Leu Leu Pro Tyr Ser Val Pro Ala Gln Pro Arg Ser  
 210 215 220



Met Asp Pro Phe Thr Gly Cys Phe Ile Pro His Pro Pro Glu Leu Leu  
 225                      230                      235                      240  
 Gly Pro Leu Arg Cys Pro Gly Asp Gly Gly Ala Leu Cys Leu Cys Pro  
                          245                      250                      255  
 Val Ala Ala Ile Ala Ala Thr Thr Ser Thr Ser Ser Ala Gly Trp Pro  
                          260                      265                      270  
 Pro Gly Thr Ala Ser Pro Gly  
                          275

<210> 3757

<211> 255

<212> PRT

<213> Homo sapiens

<400> 3757

Met Met Ser Ile Phe Leu Met Gly Cys Tyr Asp Pro Gly Ser Gln Lys  
   1                      5                      10                      15  
 Trp Cys Thr Val Thr Lys Cys Ala Gly Gly His Asp Asp Ala Thr Leu  
                          20                      25                      30  
 Ala Arg Leu Gln Asn Glu Leu Asp Met Val Lys Ile Ser Lys Asp Pro  
                          35                      40                      45  
 Ser Lys Ile Pro Ser Trp Leu Lys Val Asn Lys Ile Tyr Tyr Pro Asp  
                          50                      55                      60  
 Phe Ile Val Pro Asp Pro Lys Lys Ala Ala Val Trp Glu Ile Thr Gly  
   65                      70                      75                      80  
 Ala Glu Phe Ser Lys Ser Glu Ala His Thr Ala Asp Gly Ile Ser Ile  
                          85                      90                      95  
 Arg Phe Pro Arg Cys Thr Arg Ile Arg Asp Asp Lys Asp Trp Lys Ser

100 105 110  
Ala Thr Asn Leu Pro Gln Leu Lys Glu Leu Tyr Gln Leu Ser Lys Glu  
115 120 125  
Lys Ala Asp Phe Thr Val Val Ala Gly Asp Glu Gly Ser Ser Thr Thr  
130 135 140  
Gly Gly Ser Ser Glu Glu Asn Lys Gly Pro Ser Gly Ser Ala Val Ser  
145 150 155 160  
Arg Lys Ala Pro Ser Lys Pro Ser Ala Ser Thr Lys Lys Ala Glu Gly  
165 170 175  
Lys Leu Ser Asn Ser Asn Ser Lys Asp Gly Asn Met Gln Thr Ala Lys  
180 185 190  
Pro Ser Ala Met Lys Val Gly Glu Lys Leu Ala Thr Lys Ser Ser Pro  
195 200 205  
Val Lys Val Gly Glu Lys Arg Lys Ala Ala Asp Glu Thr Leu Cys Gln  
210 215 220  
Thr Lys Val Arg Val Lys Thr Ala Thr His His Val Gly Gln Phe Ser  
225 230 235 240  
Pro Gly Cys Val Pro Asn Leu Leu Tyr Lys Lys Phe Glu Arg Gly  
245 250 255

&lt;210&gt; 3758

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3758

Met Asn Val Pro Arg Ser Gln Pro Ala Ser Lys Glu Leu Leu Lys Gly  
1 5 10 15

Glu Leu Ser Met Tyr Asn Asn Glu Arg Arg Phe Arg Ile Arg Ser Gln  
20 25 30  
Asp Ser Tyr Asn Pro Phe Ile Leu Leu Phe Phe Ser Arg Arg Ser Leu  
35 40 45  
Ser Leu Ser Pro Arg Leu Glu Cys Ser Gly Val Ile Leu Ala His Cys  
50 55 60  
Asn Leu His Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Arg  
65 70 75 80  
Val Ala Gly Ile Thr Val Ala Arg His His Ala Trp Leu Ile Phe Val  
85 90 95  
Phe Leu Val Glu Thr Gly Phe His His Val Gly Gln Ala Gly Leu Glu  
100 105 110  
Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly  
115 120 125  
Ile Thr Gly Val Ser His His Thr Arg Phe Ile Leu Leu Phe Thr His  
130 135 140  
Ser Ser Phe Asn Lys His Thr Val Glu Ile His Ile Ser Val Ser Ala  
145 150 155 160  
Phe Asn His Arg Lys Ser Glu Leu Ser Thr Gln Leu Leu Met Cys Trp  
165 170 175  
Ile His Glu Lys Cys Ser Val Cys Phe Asn Leu Leu Ala Leu Lys Tyr  
180 185 190  
Cys Met Gln Ser Val Gly Phe Asn Ser Leu  
195 200

&lt;210&gt; 3759

&lt;211&gt; 108

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3759

Met Ser Ala Ala Phe Pro Gly Ala Ser Leu Tyr Leu Pro Met Ala Gln  
1 5 10 15  
Ser Val Ala Val Gly Pro Leu Gly Ser Thr Ile Pro Met Ala Tyr Tyr  
20 25 30  
Pro Val Gly Pro Ile Tyr Pro Pro Gly Ser Thr Val Leu Val Glu Gly  
35 40 45  
Gly Tyr Asp Ala Gly Ala Arg Phe Gly Ala Gly Ala Thr Ala Gly Asn  
50 55 60  
Ile Pro Pro Pro Pro Pro Gly Cys Pro Pro Asn Ala Ala Gln Leu Ala  
65 70 75 80  
Val Met Gln Gly Ala Asn Val Leu Val Thr Gln Arg Lys Gly Asn Phe  
85 90 95  
Phe Met Gly Gly Ser Asp Gly Gly Tyr Thr Ile Trp  
100 105

<210> 3760

<211> 377

<212> PRT

<213> Homo sapiens

<400> 3760

Met Gly His Lys Arg Glu Phe Arg Ala Pro Thr Leu Ala Ser Leu Glu  
1 5 10 15  
Asn Cys Met Lys Leu Ser Gln Met Ala Val Gln Gly Leu Gln Gln Phe  
20 25 30

Lys Ser Pro Leu Leu Gln Leu Pro His Ile Glu Glu Asp Asn Leu Arg  
 35 40 45  
 Arg Val Ser Asn His Lys Lys Tyr Lys Ile Lys Thr Ile Gln Asp Leu  
 50 55 60  
 Val Ser Leu Lys Glu Ser Asp Arg His Thr Leu Leu His Phe Leu Glu  
 65 70 75 80  
 Asp Glu Lys Tyr Glu Glu Val Met Ala Val Leu Gly Ser Phe Pro Tyr  
 85 90 95  
 Val Thr Met Asp Ile Lys Ser Gln Val Leu Asp Asp Glu Asp Ser Asn  
 100 105 110  
 Asn Ile Thr Val Gly Ser Leu Val Thr Val Leu Val Lys Leu Thr Arg  
 115 120 125  
 Gln Thr Met Ala Glu Val Phe Glu Lys Glu Gln Ser Ile Cys Ala Ala  
 130 135 140  
 Glu Glu Gln Pro Ala Glu Asp Gly Gln Gly Glu Thr Asn Lys Asn Arg  
 145 150 155 160  
 Thr Lys Gly Gly Trp Gln Gln Lys Ser Lys Gly Pro Lys Lys Thr Ala  
 165 170 175  
 Lys Ser Lys Lys Lys Lys Pro Leu Lys Lys Lys Pro Thr Pro Val Leu  
 180 185 190  
 Leu Pro Gln Ser Lys Gln Gln Lys Gln Lys Gln Ala Asn Gly Val Val  
 195 200 205  
 Gly Asn Glu Ala Ala Val Lys Glu Asp Glu Glu Glu Val Ser Asp Lys  
 210 215 220  
 Gly Ser Asp Ser Glu Glu Glu Glu Leu Gln Gln Ser Ile Gln Arg Lys  
 225 230 235 240  
 Glu Arg Ala Leu Leu Glu Thr Lys Ser Lys Ile Thr His Pro Val Tyr  
 245 250 255  
 Ser Leu Tyr Phe Pro Glu Glu Lys Gln Glu Trp Trp Trp Leu Tyr Ile

<210> 3761

<211> 156

<212> PRT

<213> Homo sapiens

<400> 3761

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Pro Ala Ser Gly Leu His Leu Ser Gly Ser Ser Asp Ser Pro Ala Ser  
 50 55 60  
 Ala Ser Ala Ser Trp Val Gln Ala Asn Leu Arg Leu Leu Asp Pro Ser  
 65 70 75 80  
 Asp Ser Pro Ala Ser Ala Ser Gln Leu Ala Gly Thr Thr Gly Val Arg  
 85 90 95  
 Asn His Ala Gln Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His  
 100 105 110  
 His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Leu Arg  
 115 120 125  
 Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Arg His Arg Ala  
 130 135 140  
 Arg Pro Ser Val Ser Phe Lys Gln Gly Ser Gly Glu  
 145 150 155

&lt;210&gt; 3762

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3762

Met Ser Ser Thr Trp Gln Val Gly Cys Leu Phe Pro Asp Ile Ser Ser  
 1 5 10 15  
 Leu Phe Gln Ser Arg Arg Gly Arg Thr Lys Gly Ile Pro Thr Leu Gly  
 20 25 30  
 Gln Leu His Phe Thr Ala Phe Leu Lys Thr Leu Pro Arg Glu Leu Cys  
 35 40 45  
 Phe Ile Ser Leu Ala Gly Thr Val Ser His Gly Gln Pro Trp Leu Gln

50                      55                      60  
 Arg Arg Leu Gly Val Leu Leu Leu Phe Phe Lys Met Val Ser Cys Ser  
 65                      70                      75                      80  
 Val Val Gln Phe Gly Val Gln Trp Arg Asp Leu Gly Ser Leu Gln Pro  
                     85                      90                      95  
 Pro Pro Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Ser Ser Ser  
                     100                      105                      110  
 Trp Asp Tyr Arg Pro Thr Pro Pro His Pro Ala Asn Phe Cys Ile Phe  
                     115                      120                      125  
 Ser Arg Asp Gly Val Leu Pro Cys Trp Pro Ser Trp Ser Gln Thr Ala  
                     130                      135                      140  
 Asp Leu Arg  
 145

&lt;210&gt; 3763

&lt;211&gt; 367

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3763

Met Cys Gly Asp Gly Thr Asn Asp Val Gly Ala Leu Lys His Ala Asp  
 1                      5                      10                      15  
 Val Gly Val Ala Leu Leu Ala Asn Ala Pro Glu Arg Val Val Glu Arg  
                     20                      25                      30  
 Arg Arg Arg Pro Arg Asp Ser Pro Thr Leu Ser Asn Ser Gly Ile Arg  
                     35                      40                      45  
 Ala Thr Ser Arg Thr Ala Lys Gln Arg Ser Gly Leu Pro Pro Ser Glu  
                     50                      55                      60



Glu Gln Pro Thr Ser Gln Arg Asp Arg Leu Ser Gln Val Leu Arg Asp  
65 70 75 80  
Leu Glu Asp Glu Ser Thr Pro Ile Val Lys Leu Gly Asp Ala Ser Ile  
85 90 95  
Ala Ala Pro Phe Thr Ser Lys Leu Ser Ser Ile Gln Cys Ile Cys His  
100 105 110  
Val Ile Lys Gln Gly Arg Cys Thr Leu Val Thr Thr Leu Gln Met Phe  
115 120 125  
Lys Ile Leu Ala Leu Asn Ala Leu Ile Leu Ala Tyr Ser Gln Ser Val  
130 135 140  
Leu Tyr Leu Glu Gly Val Lys Phe Ser Asp Phe Gln Ala Thr Leu Gln  
145 150 155 160  
Gly Leu Leu Leu Ala Gly Cys Phe Leu Phe Ile Ser Arg Ser Lys Pro  
165 170 175  
Leu Lys Thr Leu Ser Arg Glu Arg Pro Leu Pro Asn Ile Phe Asn Leu  
180 185 190  
Tyr Thr Ile Leu Thr Val Met Leu Gln Phe Phe Val His Phe Leu Ser  
195 200 205  
Leu Val Tyr Leu Tyr Arg Glu Ala Gln Ala Arg Ser Pro Glu Lys Gln  
210 215 220  
Glu Gln Phe Val Asp Leu Tyr Lys Glu Phe Glu Pro Ser Leu Val Asn  
225 230 235 240  
Ser Thr Val Tyr Ile Met Ala Met Ala Met Gln Met Ala Thr Phe Ala  
245 250 255  
Ile Asn Tyr Lys Val Arg Pro Gly Pro Cys Pro Asn Ile His Cys Leu  
260 265 270  
Pro Thr Gln Pro His Pro Met Lys Pro Ser Val Pro His Pro His Arg  
275 280 285  
Ala Arg Pro Ser Trp Arg Ala Cys Pro Arg Thr Ser Pro Trp Cys Gly

290 295 300  
Val Trp Gln Phe His Ser Trp Pro Ser Leu Ala Cys Ser Ser Ala Pro  
305 310 315 320  
Arg Pro Thr Ser Thr Ala Ser Leu Ala Ser Trp Thr Ser Leu Trp Ser  
325 330 335  
Ser Ser Trp Ser Leu Pro Arg Ser Cys Ser Trp Thr Ser Ala Trp Arg  
340 345 350  
Ser Trp Pro Thr Ala Ser Cys Ser Ser Ser Trp Gly Pro Arg Ser  
355 360 365

&lt;210&gt; 3764

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3764

Met Asn Arg Val Cys Pro Thr Cys Trp Arg Cys Ala Leu Pro Pro Ala  
1 5 10 15  
Ala Pro Gly Arg His Ser His Pro Phe Ser Asp Glu Glu Val Asp Val  
20 25 30  
Trp Arg Gln Arg Val His Ala Glu Ser Leu Leu Gln Thr Arg Leu Lys  
35 40 45  
Gly Gly Pro Gln Pro Leu Ser Gln Asn Val Ser Ser Val Ala Gly Ser  
50 55 60  
Ala Pro Glu Glu Gln Lys Gln Trp Pro Gly Val Cys Phe Gln Leu Cys  
65 70 75 80  
Ser Phe Leu Glu Ala Ser Gly Gly Cys Asp Gln Lys Ala Ala Leu Thr  
85 90 95

Gly Gly Ser Thr Gln His Leu Gln Arg Pro Lys Ser Ser

100

105

<210> 3765

<211> 274

<212> PRT

<213> Homo sapiens

<400> 3765

Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr Ser Gly

1

5

10

15

Ala Leu Leu Phe Phe Ser His Gly Gln Gln Asn Ser Ala Ala Asp Leu

20

25

30

Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu Val Ala

35

40

45

Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met Asp Pro

50

55

60

Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys Trp Ser

65

70

75

80

Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln Leu Leu

85

90

95

Ala Leu Thr Leu Trp Lys Glu Gln Asn Tyr Cys Glu Ser Arg Tyr His

100

105

110

Phe Leu His Ser Ala Asp Gly Glu Gly Cys Ala Asn Met Leu Val Glu

115

120

125

Tyr Ser Thr Ser Arg Gly Phe Arg Ser Glu Val Asp Met Phe Val Ala

130

135

140

Gln Ala Val Leu Gln Phe Leu Cys Leu Lys Asn Lys Ser Ser Ala Ser

145	150	155	160
Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro Ser Ile Glu Asp Gly			
	165	170	175
Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile Trp Phe Leu Leu Leu			
	180	185	190
Ala Val Asp Gly Gly Lys Leu Thr Val Phe Thr Val Leu Cys Glu Gln			
	195	200	205
Tyr Gln Pro Ser Leu Arg Arg Asp Pro Met Tyr Asn Glu Tyr Leu Asp			
	210	215	220
Arg Ile Gly Gln Leu Phe Phe Gly Val Pro Pro Lys Gln Thr Ser Ser			
225	230	235	240
Tyr Gly Gly Leu Leu Gly Asn Leu Leu Thr Ser Leu Met Gly Ser Ser			
	245	250	255
Glu Gln Glu Asp Gly Glu Glu Ser Pro Ser Asp Gly Ser Pro Ile Glu			
	260	265	270
Leu Asp			

&lt;210&gt; 3766

&lt;211&gt; 798

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3766

Met Ile Val Ala Leu Arg Glu Ala Leu Thr Ser Thr Asn Pro Lys Ala
1 5 10 15
Ala Leu Lys Ser Lys Ile Val Ala Glu Phe Arg Ser Gln Ala Leu Ile
20 25 30

Glu Glu Leu Leu Leu Tyr Lys Arg Ser Glu Asp Gln Ile Glu Leu Lys  
35 40 45  
Glu Lys Gln Leu Ser Thr Met Arg Val Asp Val Cys Ser Thr Glu Thr  
50 55 60  
Leu Lys Cys Leu Lys Asp Lys Thr Gly Gly Lys Lys Phe Ser Lys Glu  
65 70 75 80  
Phe Glu Glu Ala Ser Ser Lys Leu Glu Glu Phe Val Asn Gly Leu Asp  
85 90 95  
Lys Gln Val Lys Asn Gly Pro Ser Leu Thr Glu Ala Leu Glu Asn Ala  
100 105 110  
Gly Ile Phe Tyr Glu Ala Gln Tyr Lys Glu Val Lys Val Val Ala Asn  
115 120 125  
Ala Tyr Lys Thr Phe Ala Asn Arg Val Asn Asn Leu Lys Lys Lys Leu  
130 135 140  
Asp Gln Leu Lys Ser Thr Leu Pro Asp Pro Glu Glu Ser Pro Val Pro  
145 150 155 160  
Ser Pro Ser Met Asp Ala Pro Ser Pro Thr Gly Ser Glu Ser Pro Phe  
165 170 175  
Gln Gly Met Gly Gly Glu Glu Ser Gln Ser Pro Thr Val Glu Ser Glu  
180 185 190  
Lys Ser Ala Thr Pro Glu Pro Val Thr Asp Asn Arg Asp Val Glu Asp  
195 200 205  
Met Glu Leu Ser Asp Val Glu Asp Asp Gly Ser Lys Ile Ile Val Glu  
210 215 220  
Asp Arg Lys Glu Lys Pro Ala Glu Lys Ser Ala Val Ser Thr Ser Val  
225 230 235 240  
Pro Thr Lys Pro Thr Glu Asn Ile Ser Lys Ala Ser Ser Cys Thr Pro  
245 250 255  
Val Pro Val Thr Met Thr Ala Thr Pro Pro Leu Pro Lys Pro Val Asn

260 265 270  
Thr Ser Leu Ser Pro Ser Pro Ala Leu Ala Leu Pro Asn Leu Ala Asn  
275 280 285  
Val Asp Leu Ala Lys Ile Ser Ser Ile Leu Ser Ser Leu Thr Ser Val  
290 295 300  
Met Lys Asn Thr Gly Val Ser Pro Ala Ser Arg Pro Ser Pro Gly Thr  
305 310 315 320  
Pro Thr Ser Pro Ser Asn Leu Thr Ser Gly Leu Lys Thr Pro Ala Pro  
325 330 335  
Ala Thr Thr Thr Ser His Asn Pro Leu Ala Asn Ile Leu Ser Lys Val  
340 345 350  
Glu Ile Thr Pro Glu Ser Ile Leu Ser Ala Leu Ser Lys Thr Gln Thr  
355 360 365  
Gln Ser Ala Pro Ala Leu Gln Gly Leu Ser Ser Leu Leu Gln Ser Val  
370 375 380  
Thr Gly Asn Pro Val Pro Ala Ser Glu Ala Ala Ser Gln Ser Thr Ser  
385 390 395 400  
Ala Ser Pro Ala Asn Thr Thr Val Ser Thr Ile Lys Gly Arg Asn Leu  
405 410 415  
Pro Ser Ser Ala Gln Pro Phe Ile Pro Lys Ser Phe Asn Tyr Ser Pro  
420 425 430  
Asn Ser Ser Thr Ser Glu Val Ser Ser Thr Ser Ala Ser Lys Ala Ser  
435 440 445  
Ile Gly Gln Ser Pro Gly Leu Pro Ser Thr Thr Phe Lys Leu Pro Ser  
450 455 460  
Asn Ser Leu Gly Phe Thr Ala Thr His Asn Thr Ser Pro Ala Ala Pro  
465 470 475 480  
Pro Thr Glu Val Thr Ile Cys Gln Ser Ser Glu Val Ser Lys Pro Lys  
485 490 495

Leu Glu Ser Glu Ser Thr Ser Pro Ser Leu Glu Met Lys Ile His Asn  
 500 505 510  
 Phe Leu Lys Gly Asn Pro Gly Phe Ser Gly Leu Asn Leu Asn Ile Pro  
 515 520 525  
 Ile Leu Ser Ser Leu Gly Ser Ser Ala Pro Ser Glu Ser His Pro Ser  
 530 535 540  
 Asp Phe Gln Arg Gly Pro Thr Ser Thr Ser Ile Asp Asn Ile Asp Gly  
 545 550 555 560  
 Thr Pro Val Arg Asp Glu Arg Ser Gly Thr Pro Thr Gln Asp Glu Met  
 565 570 575  
 Met Asp Lys Pro Thr Ser Ser Ser Val Asp Thr Met Ser Leu Leu Ser  
 580 585 590  
 Lys Ile Ile Ser Pro Gly Ser Ser Thr Pro Ser Ser Thr Arg Ser Pro  
 595 600 605  
 Pro Pro Gly Arg Asp Glu Ser Tyr Pro Arg Glu Leu Ser Asn Ser Val  
 610 615 620  
 Ser Thr Tyr Arg Pro Phe Gly Leu Gly Ser Glu Ser Pro Tyr Lys Gln  
 625 630 635 640  
 Pro Ser Asp Gly Met Glu Arg Pro Ser Ser Leu Met Asp Ser Ser Gln  
 645 650 655  
 Glu Lys Phe Tyr Pro Asp Thr Ser Phe Gln Glu Asp Glu Asp Tyr Arg  
 660 665 670  
 Asp Phe Glu Tyr Ser Gly Pro Pro Pro Ser Ala Met Met Asn Leu Glu  
 675 680 685  
 Lys Lys Pro Ala Lys Ser Ile Leu Lys Ser Ser Lys Leu Ser Asp Thr  
 690 695 700  
 Thr Glu Tyr Gln Pro Ile Leu Ser Ser Tyr Ser His Arg Ala Gln Glu  
 705 710 715 720  
 Phe Gly Val Lys Pro Ala Phe Pro Pro Ser Val Arg Ala Leu Leu Asp

	725		730		735
Ser Ser Glu Asn Cys Asp Arg Leu Ser Ser Ser Pro Gly Leu Phe Gly					
	740		745		750
Ala Phe Ser Val Arg Gly Asn Glu Pro Gly Ser Asp Arg Ser Pro Ser					
	755		760		765
Pro Lys His Pro Cys Arg Ser His Gly Ser Pro Thr His Val Arg Arg					
	770		775		780
Gly Glu Ser Pro Gly Leu His His Phe His His Val Asp Asp					
785		790		795	

&lt;210&gt; 3767

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3767

Met Ala Ala Thr Asn Leu Glu Asn Gln Leu His Ser Ala Gln Lys Asn			
1	5	10	15
Leu Leu Phe Leu Gln Arg Glu His Ala Ser Thr Leu Lys Gly Leu His			
	20	25	30
Ser Glu Ile Arg Arg Leu Gln Gln His Cys Thr Asp Leu Thr Tyr Glu			
	35	40	45
Leu Thr Val Lys Ser Ser Glu Gln Thr Gly Asp Gly Thr Ser Lys Ser			
	50	55	60
Ser Glu Leu Lys Lys Arg Cys Glu Glu Leu Glu Ala Gln Leu Lys Val			
	65	70	75
Lys Glu Asn Glu Asn Ala Glu Leu Leu Lys Glu Leu Glu Gln Lys Asn			
	85	90	95



Ala Met Ile Thr Val Leu Glu Asn Thr Ile Lys Glu Arg Glu Lys Lys  
100 105 110  
Tyr Leu Glu Glu Leu Lys Ala Lys Ser His Lys Leu Thr Leu Leu Ser  
115 120 125  
Ser Glu Leu Glu Gln Arg Ala Ser Thr Ile Ala Tyr Leu Thr Ser Gln  
130 135 140  
Leu His Ala Ala Lys Lys Lys Leu Met Ser Ser Ser Gly Thr Ser Asp  
145 150 155 160  
Ala Ser Pro Ser Gly Ser Pro Val Leu Ala Ser Tyr Lys Pro Ala Pro  
165 170 175  
Pro Lys Asp Lys Leu Pro Glu Thr Pro Arg Arg Arg Met Lys Lys Ser  
180 185 190  
Leu Ser Ala Pro Leu His Pro Glu Phe Glu Glu Val Tyr Arg Phe Gly  
195 200 205  
Ala Glu Ser Arg Lys Leu Leu Leu Arg Glu Pro Val Asp Ala Met Pro  
210 215 220  
Asp Pro Thr Pro Phe Leu Leu Ala Arg Glu Ser Ala Glu Val His Leu  
225 230 235 240  
Ile Lys Glu Arg Pro Leu Val Ile Pro Pro Ile Ala Ser Asp Arg Ser  
245 250 255  
Gly Glu Gln His Ser Pro Ala Arg Glu Lys Pro His Lys Ala His Val  
260 265 270  
Gly Val Ala His Arg Ile His His Ala Thr Pro Pro Gln Ala Gln Pro  
275 280 285  
Glu Val Lys Thr Leu Ala Val Asp Gln Val Asn Gly Gly Lys Val Val  
290 295 300  
Arg Lys His Ser Gly Thr Asp Arg Thr Val  
305 310

&lt;210&gt; 3768

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3768

Met Thr Arg Ala Val Asn Leu Ser Cys Glu Thr Thr Glu Gly Glu Thr

1 5 10 15

Thr Phe Ser Lys Asn Arg Ala Gln Thr Val Pro Val Ser Leu Ser Pro

20 25 30

Asn Cys Ser Met Ala Trp Ser Ala Ala Asn Val Ser Ala Ala Leu Lys

35 40 45

Gly Lys Ala Leu Leu Trp Ser Gln His Ala Glu Leu Ala Ser Thr Pro

50 55 60

Leu Arg Ala Ala Pro His Gln His Trp Leu Gly Leu Asn Leu Ser Ser

65 70 75 80

Leu Ala Pro Arg Cys Lys Pro Trp Asn Ala Asn Pro Lys Gly Gln Thr

85 90 95

Pro Arg Gly Ser Gln Val Pro Gly Ala Asp Thr Phe Leu Ala Leu Ala

100 105 110

Val Met Ala Gln Met Glu Ala Lys Thr Thr Pro Leu Ser Thr Gly Arg

115 120 125

Leu Val Leu Leu Pro Arg Glu Gln Glu Pro Arg His Arg Leu Cys Thr

130 135 140

Glu Phe Ser Ile Tyr Phe Ser Gln Gly Gly Tyr Ala Lys Ala Val Cys

145 150 155 160

Leu Ser Leu Ser Gly Ser His Leu Gln Pro Val Pro Val Asp Ser Val

165 170 175

Gly Ser Thr Val Met Leu Gly Lys Asp Pro Asn Thr Arg Thr Lys His  
 180 185 190  
 Val Asp Ser Cys Gln Cys Gln Asn Gly Arg Lys Gln Gly Lys Gly Ser  
 195 200 205  
 Trp Leu Arg Pro Phe Ala Asn Arg Val Gln Arg Cys Arg His Leu Glu  
 210 215 220  
 Pro Ala Arg Ser Tyr Gln Thr Gly Ser His Leu Cys Leu Gln Arg Leu  
 225 230 235 240  
 Leu Ser Gln Arg Gln Asp Arg Gly Ala Trp Leu Cys Gln Val Ser Phe  
 245 250 255  
 Trp Asp Glu Pro Ile Leu Leu Ser Gln Val Gly His Asp Gly Glu Ala  
 260 265 270  
 Arg Arg

<210> 3769

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3769

Met Arg Asn His Phe Lys Phe Leu Ser Lys Lys Asp Lys Met Ala Ala  
 1 5 10 15  
 Ala Arg Arg Arg Ala Trp Arg Glu Gly Glu Arg Ala Ala Gly Ser Leu  
 20 25 30  
 Thr Arg Gly Leu Gln Leu Glu Pro Trp His Trp Gln Gly Ala Trp Arg  
 35 40 45  
 Arg Lys Arg Arg Lys Thr Val Ser Arg Gln Asp His Pro Asn Arg Ser

50                      55                      60  
 Ser Lys Leu Pro Trp Thr Ser Leu Pro Cys Pro His Arg Glu Ala Ala  
 65                      70                      75                      80  
 Gly Asp Arg Ala Tyr Leu Gly Asn Thr Asn His Gly Ser Asp Thr Ser  
                          85                      90                      95  
 Glu Met Ser Cys Arg Ala Ser Ala Ser Thr Leu Ile Gln Thr Leu Ser  
                          100                      105                      110  
 Phe Ser Glu Leu Leu Gln Ala Pro Gly  
                          115                      120

<210> 3770

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3770

Met Gly Gln Val Trp Asn Leu Gly Ala Cys Gln Lys Gly Glu Arg Leu  
 1                      5                      10                      15  
 Cys Gly Gln Thr His Leu Ala Cys Asn Pro Pro Leu Asn Ala Met His  
                          20                      25                      30  
 Val Thr Leu Gly Ala Ser Leu Asn Phe Cys Gly His Gln Cys Pro His  
                          35                      40                      45  
 Leu Gln Lys Cys Lys Trp Gln His Leu Phe Arg Ile Phe Leu Ile Arg  
                          50                      55                      60  
 Ile Asp Glu Ile Leu Leu Lys Ile Ser Ser Thr Trp Gly Ala Pro Arg  
 65                      70                      75                      80  
 Lys Ala Ser Ser Tyr His Phe Phe Asn Ala Ser Ser Ser Trp Val Ser  
                          85                      90                      95

Lys Thr Ser Ile Ser Gln Pro Phe Pro Cys Leu Gln Asn Thr Gln Asn  
                   100                  105                  110  
 Met Ala Leu Phe Val Trp His Arg Gly Met Trp Arg Gln Glu Val Ser  
                   115                  120                  125  
 Gly Gly Tyr Val Gly Cys Arg Cys Pro Ser Ser Cys Ser Leu Gly Ala  
                   130                  135                  140  
 Ile Pro Gly  
 145

<210> 3771

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3771

Met Cys Val Cys Met Ser Leu Thr Ser Ile Ser Gly Arg Val Thr Lys  
           1                  5                  10                  15  
 Asn Leu Ser Ile His Pro Arg Gln Gln Gly Cys Phe Ile Leu Arg Ala  
                   20                  25                  30  
 Arg Leu Gly Phe Glu Gly Asp Phe Ile Arg Met Glu Ser Leu Trp Leu  
                   35                  40                  45  
 Thr Asn Asn Cys Leu Leu Lys Tyr Gln Ala Leu Leu Leu Lys Gly Ser  
           50                  55                  60  
 Ala Val Gln Leu Lys Thr Cys Pro Cys Leu Ser Pro Ala Thr Phe Ser  
           65                  70                  75                  80  
 Gln Arg Lys Leu Glu Asn Leu Asn Met Ile Val Asn Arg Met Ala Ser  
                   85                  90                  95  
 Gly Gly Leu Gly Leu Leu Gly Glu Thr Glu Asn Ala Pro Gln Ile Pro

100 105 110  
Phe

<210> 3772

<211> 850

<212> PRT

<213> Homo sapiens

<400> 3772

Met Ile Ala Asn Ile Ser Pro Ser His Val Ala Thr Glu His Thr Leu  
1 5 10 15  
Asn Thr Leu Arg Tyr Ala Asp Arg Val Lys Glu Leu Lys Lys Gly Ile  
20 25 30  
Lys Cys Cys Thr Ser Val Thr Ser Arg Asn Arg Thr Ser Gly Asn Ser  
35 40 45  
Ser Pro Lys Arg Ile Gln Ser Ser Pro Gly Ala Leu Ser Glu Asp Lys  
50 55 60  
Cys Ser Pro Lys Lys Val Lys Leu Gly Phe Gln Gln Ser Leu Thr Val  
65 70 75 80  
Ala Ala Pro Gly Ser Thr Arg Gly Lys Val His Pro Leu Thr Ser His  
85 90 95  
Pro Pro Asn Ile Pro Phe Thr Ser Ala Pro Lys Val Ser Gly Lys Arg  
100 105 110  
Gly Gly Ser Arg Gly Ser Pro Ser Gln Glu Trp Val Ile His Ala Ser  
115 120 125  
Pro Val Lys Gly Thr Val Arg Ser Gly His Val Ala Lys Lys Lys Pro  
130 135 140

Glu Glu Ser Ala Pro Leu Cys Ser Glu Lys Asn Arg Met Gly Asn Lys  
 145                      150                      155                      160  
 Thr Val Leu Gly Trp Glu Ser Arg Ala Ser Gly Pro Gly Glu Gly Leu  
                          165                      170                      175  
 Val Arg Gly Lys Leu Ser Thr Lys Cys Lys Lys Val Gln Thr Val Gln  
                          180                      185                      190  
 Pro Val Gln Lys Gln Leu Val Ser Arg Val Glu Leu Ser Phe Gly Asn  
                          195                      200                      205  
 Ala His His Arg Ala Glu Tyr Ser Gln Asp Ser Gln Arg Gly Thr Pro  
                          210                      215                      220  
 Ala Arg Pro Ala Ser Glu Ala Trp Thr Asn Ile Pro Pro His Gln Lys  
 225                      230                      235                      240  
 Glu Arg Glu Glu His Leu Arg Phe Tyr His Gln Gln Phe Gln Gln Pro  
                          245                      250                      255  
 Pro Leu Leu Gln Gln Lys Leu Lys Tyr Gln Pro Leu Lys Arg Ser Leu  
                          260                      265                      270  
 Arg Gln Tyr Arg Pro Pro Glu Gly Gln Leu Thr Asn Glu Thr Pro Pro  
                          275                      280                      285  
 Leu Phe His Ser Tyr Ser Glu Asn His Asp Gly Ala Gln Val Glu Glu  
                          290                      295                      300  
 Leu Asp Asp Ser Asp Phe Ser Glu Asp Ser Phe Ser His Ile Phe Ser  
 305                      310                      315                      320  
 Gln Arg Ala Thr Lys Gln Arg Asn Thr Leu Glu Asn Ser Glu Asp Ser  
                          325                      330                      335  
 Phe Phe Leu His Gln Thr Trp Gly Gln Gly Pro Glu Lys Gln Val Ala  
                          340                      345                      350  
 Glu Arg Gln Gln Ser Leu Phe Ser Ser Pro Arg Thr Gly Asp Lys Lys  
                          355                      360                      365  
 Asp Leu Thr Lys Ser Trp Val Asp Ser Arg Asp Pro Ile Asn His Arg

370 375 380  
Arg Ala Ala Leu Asp His Ser Cys Ser Pro Ser Lys Gly Pro Val Asp  
385 390 395 400  
Trp Ser Arg Glu Asn Ser Thr Ser Ser Gly Pro Ser Pro Arg Asp Ser  
405 410 415  
Leu Ala Glu Lys Pro Tyr Cys Ser Gln Val Asp Phe Ile Tyr Arg Gln  
420 425 430  
Glu Arg Gly Gly Gly Ser Ser Phe Asp Leu Arg Lys Asp Ala Ser Gln  
435 440 445  
Ser Glu Val Ser Gly Glu Asn Glu Gly Asn Leu Pro Ser Pro Glu Glu  
450 455 460  
Asp Gly Phe Thr Ile Ser Leu Ser His Val Ala Val Pro Gly Ser Pro  
465 470 475 480  
Asp Gln Arg Asp Thr Val Thr Thr Pro Leu Arg Glu Val Ser Ala Asp  
485 490 495  
Gly Pro Ile Gln Val Thr Ser Thr Val Lys Asn Gly His Ala Val Pro  
500 505 510  
Gly Glu Asp Pro Arg Gly Gln Leu Gly Thr His Ala Glu Tyr Ala Ser  
515 520 525  
Gly Leu Met Ser Pro Leu Thr Met Ser Leu Leu Glu Asn Pro Asp Asn  
530 535 540  
Glu Gly Ser Pro Pro Ser Glu Gln Leu Val Gln Asp Gly Ala Thr His  
545 550 555 560  
Ser Leu Val Ala Glu Ser Thr Gly Gly Pro Val Val Ser His Thr Val  
565 570 575  
Pro Ser Gly Asp Gln Glu Ala Ala Leu Pro Val Ser Ser Ala Thr Arg  
580 585 590  
His Leu Trp Leu Ser Ser Ser Pro Pro Asp Asn Lys Pro Gly Gly Asp  
595 600 605



Leu Pro Ala Leu Ser Pro Ser Pro Ile Arg Gln His Pro Ala Asp Lys  
610 615 620  
Leu Pro Ser Arg Glu Ala Asp Leu Gly Glu Ala Cys Gln Ser Arg Glu  
625 630 635 640  
Thr Val Leu Phe Ser His Glu His Met Gly Ser Glu Gln Tyr Asp Ala  
645 650 655  
Asp Ala Glu Glu Thr Gly Leu Asp Gly Ser Trp Gly Phe Pro Gly Lys  
660 665 670  
Pro Phe Thr Thr Ile His Met Gly Val Pro His Ser Gly Pro Thr Leu  
675 680 685  
Thr Pro Arg Thr Gly Ser Ser Asp Val Ala Asp Gln Leu Trp Ala Gln  
690 695 700  
Glu Arg Lys His Pro Thr Arg Leu Gly Trp Gln Glu Phe Gly Leu Ser  
705 710 715 720  
Thr Asp Pro Ile Lys Leu Pro Cys Asn Ser Glu Asn Val Thr Trp Leu  
725 730 735  
Lys Pro Arg Pro Ile Ser Arg Cys Leu Ala Arg Pro Ser Ser Pro Leu  
740 745 750  
Val Pro Ser Cys Ser Pro Lys Thr Ala Gly Thr Leu Arg Gln Pro Thr  
755 760 765  
Leu Glu Gln Ala Gln Gln Val Val Ile Arg Ala His Gln Glu Gln Leu  
770 775 780  
Asp Glu Met Ala Glu Leu Gly Phe Lys Glu Glu Thr Leu Met Ser Gln  
785 790 795 800  
Leu Ala Ser Asn Asp Phe Glu Asp Phe Val Thr Gln Leu Asp Glu Ile  
805 810 815  
Met Val Leu Lys Ser Lys Cys Ile Gln Ser Leu Arg Ser Gln Leu Gln  
820 825 830  
Leu Tyr Leu Thr Cys His Gly Pro Thr Ala Ala Pro Glu Gly Thr Val

835                                      840                                      845

Pro Ser

850

<210> 3773

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3773

Met Arg Gly Leu Pro Val Cys Leu Ala Gln Asn Ser Ser Pro Ala Pro

1                                      5                                      10                                      15

Val Asn Thr Trp Leu Ala Thr Ala Leu Lys Pro Arg Gly Leu Ser Thr

20                                      25                                      30

Thr Pro Gly Gly Gly Gly Leu Lys Arg Lys Gly Gln Lys Gln Val Ala

35                                      40                                      45

Ser Ala Gly Gln Val Gln Trp Gly Phe Ser Gln Thr His Thr Ile Lys

50                                      55                                      60

Cys Val Cys Arg Leu Thr Val Ser Pro Ala Gly Gly Phe Gln Gly Pro

65                                      70                                      75                                      80

Pro Val Ser Leu Leu Ser Trp Asp Met Tyr Leu Leu Ile Met Pro Leu

85                                      90                                      95

Ser Met Leu Trp Leu Met

100

<210> 3774

<211> 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3774

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Met Met Gly Ser Arg Arg Lys Val Leu Leu Thr Ser Gln Met Gly Gln
  1              5              10              15
Leu Gly Lys Gly Ala Pro His Phe Pro Asp Gly Val Ala Val Arg Gln
      20              25              30
Arg Cys Ser Ser Gln Pro Arg Arg Gly Ser Gln Ala Val Ala Leu Leu
      35              40              45
Thr Ser Gln Thr Gly Leu Pro Gly Arg Gly Ala Pro His Phe Pro Glu
      50              55              60
Gly Val Ala Gly Gln Arg Arg Ser Ser Thr Ala Arg Leu Gly Ser Arg
      65              70              75              80
Gln Glu Glu Leu Leu Thr Ser Lys Met Met Gly Gly Arg Ala Glu Ala
      85              90              95
Leu Pro Thr Ser Gln Thr Gly Arg Pro Gly Arg Gly Ala Pro His Leu
      100             105             110
Pro Asp Arg Val Ala Gly Gln Arg Arg Ser Ser Pro Pro Arg Arg Gly
      115             120             125
Gly Arg Ala Glu Ala Leu His Thr Ser Gln Met Gly Trp Trp Pro Asp
      130             135             140
Arg Gly Ala Pro His Asn Leu Asp Gly Ala Ala Gly Gln Arg His Ser
      145             150             155             160
Pro Leu Pro Arg Arg Gly Ser Arg Ala Glu Trp Pro Gly Arg Gly Thr
      165             170             175
Pro His Asn Pro Asp Gly Ala Ala Gly Gln Arg Arg Ser Ser Pro Pro
      180             185             190
Arg Trp Gly Ser Arg Glu Glu Ala Leu Leu Thr Ser Gln Thr Leu Gly

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195	200	205
Gly Gln Ala Glu Ala Leu Leu Thr Ser Gln Met Gly Trp Leu Gly Arg		
210	215	220
Gly Ala Pro His Phe Pro Asp Lys Val Ala Gly Gln Arg Arg Tyr Ser		
225	230	235
Pro Pro Arg		240

&lt;210&gt; 3775

&lt;211&gt; 281

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3775

Met Gly Glu Thr Gln Gly Pro Gly Pro Gln Phe Ser Val Leu Cys Pro		
1	5	10
Ser Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn		
20	25	30
Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser		
35	40	45
Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp		
50	55	60
Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu		
65	70	75
Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu		
85	90	95
Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu Ile		
100	105	110

Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala  
115 120 125  
Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp  
130 135 140  
Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile Tyr  
145 150 155 160  
Lys Gln Pro Ala Val Glu Val Pro Gln Tyr Val Gly Ile Arg Leu Leu  
165 170 175  
Val Glu Gly Phe Thr Ile Lys Lys Pro Met Ala Met Cys His Arg Arg  
180 185 190  
Met Gly Val Arg Pro Ala Val Pro Leu Leu Thr Gln Arg Gly Ser Gly  
195 200 205  
Glu Ala Glu Val Ser Gly Ser Leu Arg Lys Leu Pro Lys Val Ala Gln  
210 215 220  
Leu Arg Arg Gly Thr Ala Gly Met Gln Thr Gln Pro Val Thr Thr Ser  
225 230 235 240  
Pro Ala Ser Thr Pro Arg Pro Ser Cys Leu Leu Pro Met Tyr Ser Asp  
245 250 255  
Thr Arg Ala Arg Ser Ser Asp Asp Ser Thr Ala Ser Trp Trp Ala Leu  
260 265 270  
Arg Pro Cys Arg Pro Gln Ala Arg Pro  
275 280

&lt;210&gt; 3776

&lt;211&gt; 470

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3776

Met	Asn	Glu	Glu	Asn	Ile	Asp	Gly	Thr	Asn	Gly	Cys	Ser	Lys	Val	Arg
1				5					10					15	
Thr	Gly	Ile	Gln	Asn	Glu	Ala	Ala	Leu	Leu	Ala	Leu	Met	Glu	Lys	Thr
				20					25					30	
Gly	Tyr	Asn	Met	Val	Gln	Glu	Asn	Gly	Gln	Arg	Lys	Phe	Gly	Gly	Pro
				35					40					45	
Pro	Pro	Gly	Trp	Glu	Gly	Pro	Pro	Pro	Pro	Arg	Gly	Cys	Glu	Val	Phe
				50					55					60	
Val	Gly	Lys	Ile	Pro	Arg	Asp	Met	Tyr	Glu	Asp	Glu	Leu	Val	Pro	Val
				65					70					75	
Phe	Glu	Arg	Ala	Gly	Lys	Ile	Tyr	Glu	Phe	Arg	Leu	Met	Met	Glu	Phe
				85					90					95	
Ser	Gly	Glu	Asn	Arg	Gly	Tyr	Ala	Phe	Val	Met	Tyr	Thr	Thr	Lys	Glu
				100					105					110	
Glu	Ala	Gln	Leu	Ala	Ile	Arg	Ile	Leu	Asn	Asn	Tyr	Glu	Ile	Arg	Pro
				115					120					125	
Gly	Lys	Phe	Ile	Gly	Val	Cys	Val	Ser	Leu	Asp	Asn	Cys	Arg	Leu	Phe
				130					135					140	
Ile	Gly	Ala	Ile	Pro	Lys	Glu	Lys	Lys	Lys	Glu	Glu	Ile	Leu	Asp	Glu
				145					150					155	
Met	Lys	Lys	Val	Thr	Glu	Gly	Val	Val	Asp	Val	Ile	Val	Tyr	Pro	Ser
				165					170					175	
Ala	Thr	Asp	Lys	Thr	Lys	Asn	Arg	Gly	Phe	Ala	Phe	Val	Glu	Tyr	Glu
				180					185					190	
Ser	His	Arg	Ala	Ala	Ala	Met	Ala	Arg	Arg	Lys	Leu	Ile	Pro	Gly	Thr
				195					200					205	
Phe	Gln	Leu	Trp	Gly	His	Thr	Ile	Gln	Val	Asp	Trp	Ala	Asp	Pro	Glu
				210					215					220	

Lys Glu Val Asp Glu Glu Thr Met Gln Arg Val Lys Val Leu Tyr Val  
225 230 235 240  
Arg Asn Leu Met Ile Ser Thr Thr Glu Glu Thr Ile Lys Ala Glu Phe  
245 250 255  
Asn Lys Phe Lys Pro Gly Ala Val Glu Arg Val Lys Lys Leu Arg Asp  
260 265 270  
Tyr Ala Phe Val His Phe Phe Asn Arg Glu Asp Ala Val Ala Ala Met  
275 280 285  
Ser Val Met Asn Gly Lys Cys Ile Asp Gly Ala Ser Ile Glu Val Thr  
290 295 300  
Leu Ala Lys Pro Val Asn Lys Glu Asn Thr Trp Arg Gln His Leu Asn  
305 310 315 320  
Gly Gln Ile Ser Pro Asn Ser Glu Asn Leu Ile Val Phe Ala Asn Lys  
325 330 335  
Glu Glu Ser His Pro Lys Thr Leu Gly Lys Leu Pro Thr Leu Pro Ala  
340 345 350  
Arg Leu Asn Gly Gln His Ser Pro Ser Pro Pro Glu Val Glu Arg Cys  
355 360 365  
Thr Tyr Pro Phe Tyr Pro Gly Thr Lys Leu Thr Pro Ile Ser Met Tyr  
370 375 380  
Ser Leu Lys Ser Asn His Phe Asn Ser Ala Val Met His Leu Asp Tyr  
385 390 395 400  
Tyr Cys Asn Lys Asn Asn Trp Ala Pro Pro Glu Tyr Tyr Leu Tyr Ser  
405 410 415  
Thr Thr Ser Gln Asp Gly Lys Val Leu Leu Val Tyr Lys Ile Val Ile  
420 425 430  
Pro Ala Ile Ala Asn Gly Ser Gln Ser Tyr Phe Met Pro Asp Lys Leu  
435 440 445  
Cys Thr Thr Leu Glu Asp Ala Lys Glu Leu Ala Ala Gln Phe Thr Leu

450                      455                      460  
Leu His Leu Gly Pro Phe  
465                      470

<210> 3777

<211> 382

<212> PRT

<213> Homo sapiens

<400> 3777

Met Phe Cys Leu Glu Ala Ile Val Lys His Ser Glu Ile Ser Thr His  
1                      5                      10                      15  
Cys Asp Lys Ile Glu Ala Asn Gly Gly Leu Gln Leu Leu Gln Arg Leu  
20                      25                      30  
Tyr Arg Leu His Lys Asp Cys Pro Lys Val Gln Arg Asn Ile Met Arg  
35                      40                      45  
Val Ile Gly Asn Met Ala Leu Asn Glu His Leu His Ser Ser Ile Val  
50                      55                      60  
Arg Ser Gly Trp Val Ser Ile Met Ala Glu Ala Met Lys Ser Pro His  
65                      70                      75                      80  
Ile Met Glu Ser Ser His Ala Ala Arg Ile Leu Ala Asn Leu Asp Arg  
85                      90                      95  
Glu Thr Val Gln Glu Lys Tyr Gln Asp Gly Val Tyr Val Leu His Pro  
100                      105                      110  
Gln Tyr Arg Thr Ser Gln Pro Ile Lys Ala Asp Val Leu Phe Ile His  
115                      120                      125  
Gly Leu Met Gly Ala Ala Phe Lys Thr Trp Arg Gln Gln Asp Ser Glu  
130                      135                      140



Gln Ala Val Ile Glu Lys Pro Met Glu Asp Glu Asp Arg Tyr Thr Thr  
 145                      150                      155                      160  
 Cys Trp Pro Lys Thr Trp Leu Ala Lys Asp Cys Pro Ala Leu Arg Ile  
                          165                      170                      175  
 Ile Ser Val Glu Tyr Asp Thr Ser Leu Ser Asp Trp Arg Ala Arg Cys  
                          180                      185                      190  
 Pro Met Glu Arg Lys Ser Ile Ala Phe Arg Ser Asn Glu Leu Leu Arg  
                          195                      200                      205  
 Lys Leu Arg Ala Ala Gly Val Gly Asp Arg Pro Val Val Trp Ile Ser  
                          210                      215                      220  
 His Ser Met Gly Gly Leu Leu Val Lys Lys Met Leu Leu Glu Ala Ser  
 225                      230                      235                      240  
 Thr Lys Pro Glu Met Ser Thr Val Ile Asn Asn Thr Arg Gly Ile Ile  
                          245                      250                      255  
 Phe Tyr Ser Val Pro His His Gly Ser Arg Leu Ala Glu Tyr Ser Val  
                          260                      265                      270  
 Asn Ile Arg Tyr Leu Leu Phe Pro Ser Leu Glu Val Lys Glu Leu Ser  
                          275                      280                      285  
 Lys Asp Ser Pro Ala Leu Lys Thr Leu Gln Asp Asp Phe Leu Glu Phe  
                          290                      295                      300  
 Ala Lys Asp Lys Asn Phe Gln Val Leu Asn Phe Val Glu Thr Leu Pro  
 305                      310                      315                      320  
 Thr Tyr Ile Gly Ser Met Ile Lys Leu His Val Val Pro Val Glu Ser  
                          325                      330                      335  
 Ala Asp Leu Gly Ile Gly Asp Leu Ile Pro Val Asp Val Asn His Leu  
                          340                      345                      350  
 Asn Ile Cys Lys Pro Lys Lys Lys Asp Ala Phe Leu Tyr Gln Arg Thr  
                          355                      360                      365  
 Leu Gln Phe Ile Arg Glu Ala Leu Ala Lys Asp Leu Glu Asn

370

375

380

&lt;210&gt; 3778

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3778

Met Phe Gln Arg Leu Asn Lys Met Phe Val Gly Glu Val Ser Ser Ser

1

5

10

15

Ser Asn Gln Glu Pro Glu Phe Asn Glu Lys Glu Asp Asp Glu Trp Ile

20

25

30

Leu Val Asp Phe Ile Asp Thr Cys Thr Gly Phe Ser Ala Glu Gly Glu

35

40

45

Glu Glu Glu Glu Asp Ile Ser Glu Glu Ser Pro Thr Glu His Pro Ser

50

55

60

Val Phe Ser Cys Leu Pro Ala Ser Leu Glu Cys Leu Ala Asp Thr Ser

65

70

75

80

Asp Ser Cys Phe Leu Gln Phe Glu Ser Cys Pro Met Glu Glu Ser Trp

85

90

95

Phe Ile Thr Pro Pro Pro Cys Phe Thr Ala Gly Gly Leu Thr Thr Ile

100

105

110

Lys Val Glu Thr Ser Pro Met Glu Asn Leu Leu Ile Glu His Pro Ser

115

120

125

Met Ser Val Tyr Ala Val His Asn Ser Cys Pro Gly Leu Ser Glu Ala

130

135

140

Thr Arg Gly Thr Asp Glu Leu His Ser Pro Ser Ser Pro Arg Ala Arg

145

150

155

160

Lys Ser Cys Leu

<210> 3779

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3779

Met	Trp	Pro	Asp	Gly	Ser	Ser	Phe	Thr	Gly	Thr	Phe	Tyr	Leu	Ser	His
1				5					10					15	
Arg	Glu	Gly	Tyr	Gly	Thr	Met	Tyr	Met	Lys	Thr	Arg	Leu	Phe	Gln	Thr
				20					25					30	
His	Cys	His	Asn	Asp	Ile	Val	Asn	Leu	Leu	Leu	Asp	Cys	Gly	Ala	Asp
				35					40					45	
Val	Asn	Lys	Cys	Ser	Asp	Glu	Gly	Leu	Thr	Ala	Leu	Ser	Met	Cys	Phe
				50					55					60	
Leu	Leu	His	Tyr	Pro	Ala	Gln	Ser	Phe	Lys	Pro	Asn	Val	Ala	Glu	Arg
				65					70					75	
Thr	Ile	Pro	Glu	Pro	Gln	Glu	Pro	Pro	Lys	Phe	Pro	Val	Val	Pro	Ile
									85					90	
Leu	Ser	Ser	Ser	Phe	Met	Asp	Thr	Asn	Leu	Glu	Ser	Leu	Tyr	Tyr	Glu
									100					105	
Val	Asn	Val	Pro	Ser	Gln	Gly	Ser	Tyr	Glu	Leu	Arg	Pro	Pro	Pro	Ala
									115					120	
Pro	Leu	Leu	Leu	Pro	Arg	Val	Ser	Gly	Ser	His	Glu	Gly	Gly	His	Phe
									130					135	
Gln	Asp	Thr	Gly	Gln	Cys	Gly	Gly	Ser	Met	Asp	His	Arg	Ser	Ser	Ser
														140	

145                      150                      155                      160  
 Leu Lys Gly Asp Ser Pro Leu Val Lys Gly Ser Leu Gly His Val Glu  
                          165                      170                      175  
 Ser Gly Leu Glu Asp Val Leu Gly Asn Thr Asp Arg Gly Ser Leu Cys  
                          180                      185                      190  
 Ser Ala Glu Thr Lys Phe Glu Ser Asn Val Cys Val Cys Asp Phe Ser  
                          195                      200                      205  
 Ile Glu Leu Ser Gln Ala Met Leu Glu Arg Ser Ala Gln Ser His Ser  
                          210                      215                      220  
 Leu Leu Lys Met Ala Ser Pro Ser Pro Cys Thr Ser Ser Phe Asp Lys  
 225                      230                      235                      240  
 Gly Thr Met Arg Arg Met Ala Leu Ser Met Ile Glu  
                          245                      250

<210> 3780

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3780

Met Phe Cys Phe Asp Asn Thr Phe Ser Thr Ile Ser Glu Lys Val Ile  
   1                      5                      10                      15  
 Phe Phe Glu Leu Ile Leu Asp Asn Met Gly Glu Gln Ala Gln Glu Gln  
                          20                      25                      30  
 Glu Asp Trp Lys Lys Tyr Ile Thr Gly Thr Asp Ile Leu Asp Met Lys  
                          35                      40                      45  
 Leu Glu Asp Ile Leu Glu Ser Ile Asn Ser Ile Lys Ser Arg Leu Ser  
                          50                      55                      60

出証特 2 0 0 4 - 3 0 5 9 6 6 0

100 105 110  
 Pro Leu Arg Ile Ala Thr Cys Arg Gly Ala Val Leu Ser Pro Gln Phe  
 115 120 125  
 Leu Ser Leu Trp Tyr Leu Met Leu Leu Thr Thr Ala Ser Phe Leu Thr  
 130 135 140  
 Ser Gly Phe Leu Thr Pro Phe Pro Ala Cys Ala Leu Ala Ala Ser Pro  
 145 150 155 160  
 Pro Cys Thr Gly Phe Arg Gly Cys Ser Ala Pro Gly Ala Ala Gln Ala  
 165 170 175  
 Cys Pro Leu

&lt;210&gt; 3782

&lt;211&gt; 1028

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3782

Met Asp Asp Gln Tyr Arg Thr Leu Met Arg Ile Ser Val Ala Asp Pro  
 1 5 10 15  
 Met Val Leu Ser Leu Val Val Pro Ser Ala Glu Arg Ser Pro Tyr Phe  
 20 25 30  
 Gln Gly Gln Gln Leu Gln Gln Leu Leu Gln Ala Gly Ser Val Glu Leu  
 35 40 45  
 Glu Gly Ile Ile Met Ser Leu Glu Ser Val Leu Tyr Gly Val Cys Ala  
 50 55 60  
 His Phe Pro Arg Leu Phe Phe Leu Ser Asp Ser Glu Leu Val Ala Leu  
 65 70 75 80

Leu Ala Ala Arg Leu Glu Ser Cys Glu Ala Gln Leu Trp Val Arg Arg  
                     85                    90                    95  
 Cys Phe Pro His Val His Ala Val Ser Phe Arg Ser Cys Pro Thr Gly  
                     100                    105                    110  
 Glu Lys Asn Thr Asp Asp Trp Glu Ser Ser Pro Asn Thr Gln Thr Gln  
                     115                    120                    125  
 Val Glu Ala Leu Ala Val Leu Gly Ala Gly Gly Glu Glu Val Lys Leu  
                     130                    135                    140  
 Gln Gly Pro Leu Pro Leu His Pro Asp Leu Pro Lys Trp Leu Ala Ser  
 145                    150                    155                    160  
 Leu Glu Lys Cys Leu Arg Leu Ala Leu Val His Met Leu Gln Gly Cys  
                     165                    170                    175  
 Val Ala Ala Arg Leu Ala Arg Gly Pro Ser Leu Gly Glu Ala Leu Lys  
                     180                    185                    190  
 Gln Leu Pro Lys Gln Asn Lys Leu Tyr Leu Gln Leu Tyr Val Gln His  
                     195                    200                    205  
 Trp Ile Asp Leu Val Gln Ala Phe Pro Trp Gln Cys Val Leu Val Ala  
                     210                    215                    220  
 Glu Glu Val Val Trp Arg Ala Glu Met Glu Glu Ala Leu Leu Glu Trp  
 225                    230                    235                    240  
 Gly Thr Leu Ala Met Val Ser Met His Met Arg Lys Leu Glu Val Leu  
                     245                    250                    255  
 Val Asn Phe Met Arg Ala Gln Arg Ala Ser Gln Gly Gly Gln Ser Leu  
                     260                    265                    270  
 Pro Ser Val Arg Gln Thr Ser Leu Leu Ser Ala Leu Leu Val Met Ala  
                     275                    280                    285  
 Val Thr His Arg Asp Ile Ala Gln Leu Leu Glu Gln His Gln Val Ser  
                     290                    295                    300  
 Asp Leu Thr Asp Phe His Trp Val Arg Gln Leu Lys Tyr His Leu Gly

305                      310                      315                      320  
Ser Pro His Ile Ile Pro Lys Ser Pro Leu Gln Ser Leu Lys Thr Ile  
                         325                      330                      335  
Ala Ser Ser Glu Pro Ser Leu Ser Pro Ala Ala Cys Trp Ile Asp Val  
                         340                      345                      350  
Leu Gly Arg Ser Phe Leu Tyr Asn Tyr Glu Tyr Leu Gly Pro Arg Leu  
                         355                      360                      365  
Gly Pro Leu Pro Ser Leu Leu Pro Glu Arg Pro Ala Leu Val Leu Leu  
                         370                      375                      380  
Leu Ala Leu Glu Glu Val Ala Cys Gly Thr Val Leu Gly Pro Asn Gly  
385                      390                      395                      400  
Val Gly Lys Arg Ala Ile Val Asn Ser Leu Ala Gln Ala Leu Gly Arg  
                         405                      410                      415  
Gln Leu Val Met Leu Pro Cys Ser Pro Gln Ile Glu Ala Gln Cys Leu  
                         420                      425                      430  
Ser Asn Tyr Leu Asn Gly Ala Leu Gln Gly Gly Ala Trp Leu Leu Leu  
                         435                      440                      445  
Glu Lys Val His Gln Leu Pro Pro Gly Leu Leu Ser Ala Leu Gly Gln  
                         450                      455                      460  
Arg Leu Gly Glu Leu His His Leu Tyr Ala Pro Leu Tyr Gln Glu Ala  
465                      470                      475                      480  
Ser Arg Asn Thr Ser Thr Ile Asp Pro Thr Gln Pro Gln Leu Leu Gly  
                         485                      490                      495  
Ser Ser Phe Phe Glu Lys His His Val Ser Val Arg Leu Gly Tyr Gly  
                         500                      505                      510  
Cys Leu Leu Val Leu Arg Ala Leu Ser Ser Ala Val Pro Ala Asn Leu  
                         515                      520                      525  
His Leu Leu Leu Arg Pro Val Ala Leu Ala Leu Pro Asp Leu Arg Gln  
                         530                      535                      540



Val Ala Glu Leu Thr Leu Leu Gly Ala Gly Met Arg Asp Ala Phe Gln  
545 550 555 560  
Met Ala Thr Arg Leu Ser Lys Phe Phe Ser Leu Glu Arg Glu Leu Val  
565 570 575  
Ser Gly Pro Leu Pro Cys Arg Leu Pro Leu Leu Lys Gln Ile Leu Glu  
580 585 590  
Asp Thr Ile Arg Thr Leu Asn Val Thr Lys Glu Glu Pro Lys Cys Gln  
595 600 605  
Lys Pro Arg Ser Leu Ala Ala Ile Glu Glu Ala Ala Leu Leu His Ala  
610 615 620  
Leu Leu Arg Ser Pro Leu Phe Ser Ile Leu Asn Gly Leu His Leu His  
625 630 635 640  
Asn Leu Arg Gly Leu Leu Cys Ala Leu Phe Pro Ser Ala Ser Gln Val  
645 650 655  
Leu Ala Glu Pro Met Thr Tyr Lys Leu Met Lys Pro Leu Val Val Glu  
660 665 670  
Glu Leu Gln Gln Val Gly Leu Asp Pro Ser Pro Asp Ile Leu Gly Ser  
675 680 685  
Leu Glu Gln Leu Ser Gln Ala Leu Ser Arg Ala Ser Gly Ile Leu Leu  
690 695 700  
Leu Gly Pro Ala Gly Ser Gly Lys Thr Ile Cys Trp His Ser Leu Phe  
705 710 715 720  
Lys Ile Gln Asn Arg Leu Ala Ala Met Glu Asp Thr Ser Thr Gln Gly  
725 730 735  
Cys Gln Pro Val Glu Ile Thr His Leu Tyr Pro Ser Gly Leu Ser Pro  
740 745 750  
Gln Glu Phe Leu Gly Trp Leu Glu Gly Ser Cys Trp His His Gly Ile  
755 760 765  
Phe Pro Lys Val Leu Arg Ala Ala Gly Gln Cys Asn Asn Met Gly Gln

770	775	780
Lys Arg Gln Thr Glu Glu Ser Ile Gly Ile Gln His Trp Ile Ile Cys		
785	790	795
Asp Gly Ala Ser Asn Gly Ala Trp Leu Asp Ser Ile Thr Cys Leu Leu		800
	805	810
Ser Glu Leu Pro Gln Leu Ser Leu Pro Ser Gly Gln Gln Ile Ala Arg		815
	820	825
Pro Pro Gly Thr Phe Leu Leu Met Glu Val Ala Asp Thr Thr Gly Ile		830
	835	840
Ser Pro Thr Val Val Gly Cys Cys Ala Leu Val Trp Cys Gly Gly Glu		845
	850	855
Gln Thr Trp Gln Cys Ile Leu Ser Ala Leu Met Ala Ser Leu Pro Tyr		860
	865	870
Glu Tyr Arg Leu Gln His Arg Thr Val Ala Glu Leu Asn His Met Ala		875
	885	890
Glu Val Leu Val Pro Ala Thr Leu Arg Phe Leu Thr Cys Gln Gly Val		895
	900	905
Ser Ser Leu Leu Gln Val His Gly Gln Gln Ala Val Cys Ala Gly Val		910
	915	920
Ala Glu Val Thr Ser Met Ala Arg Ile Leu His Ser Leu Leu Asp Leu		925
	930	935
His Leu Arg Leu Lys Glu Glu Lys Ala Pro Gly Pro Glu Asp Leu Ser		940
	945	950
Tyr Ser Asp Pro Val Ala Gln Ser Phe Arg Ser Ser Lys Ser Ser Phe		955
	965	970
Leu Asn Arg Ser Gln Val Asp Ser Asp Asp Val Pro Asp Lys Cys Arg		975
	980	985
Glu His Leu Leu Ala Val Ser Ser Phe Leu Phe Ala Leu Ile Trp Gly		990
	995	1000
		1005

Phe Gly Ala His Leu Pro Ser Arg Tyr Leu Pro Gly Trp Gly Met Gly

1010

1015

1020

Asp Ala Glu Gly

1025

<210> 3783

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3783

Met Asn His Ala Ser Cys Asn Thr Phe Ser Gln Thr Glu Thr Pro Lys

1

5

10

15

Tyr Ala Cys Asn Val Leu Thr Lys Lys Glu Ala Ile Val Gln Leu Ala

20

25

30

Lys His Leu Asn Leu Phe Arg Val Arg Glu Glu Ser Ser Asn Cys Leu

35

40

45

Asp Val Thr Trp Arg Glu Gly Cys Gly Lys His His Ser Leu Gln Ala

50

55

60

Pro Phe Ser Leu Cys Glu Ala Phe Ser Lys Met Gln Pro Ala Leu Thr

65

70

75

80

His Gln Ala Trp Phe Cys Ser Pro Cys His Arg Asp Pro Ala Gly Ser

85

90

95

Leu Ala Met Arg Arg Cys Asn Cys Val Ser Cys Gly Leu Leu Gln Lys

100

105

110

Asp Trp Pro Pro Pro Gln Thr

115

&lt;210&gt; 3784

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3784

Met Leu Leu His Gly Leu Ser Gln Ala Arg Pro Ser Val Gly Leu Glu

1 5 10 15

Gln Leu Ser Cys Gln Thr Leu Thr Arg Leu Gly Lys Gly Leu Val Thr

20 25 30

Gly Gln Phe Pro Ala Cys Arg Ala Pro Asn Cys Cys Ser Arg Gln Val

35 40 45

Pro Glu Arg Gln Phe Gln Ile Asn Ala Cys Pro Ser Gln Gly Thr Ala

50 55 60

Glu Arg Glu Arg Pro Glu Thr Ala Thr Thr Pro Phe Leu His Pro Leu

65 70 75 80

Cys Pro Pro Gly Ile Gln Leu Asn His Leu Leu Leu His Ile Leu Gly

85 90 95

Lys Lys Asp Asp Ala Val Leu Gly Pro Pro Ala Ile Asn Asp Arg Gln

100 105 110

Leu Phe Asp Leu Ala Gly Ser Gln Val Asp Val Phe Ser Gly Ala Gln

115 120 125

Leu Phe Leu Gln Pro Thr Ser Gln Val Asp Ser

130 135

&lt;210&gt; 3785

&lt;211&gt; 1224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3785

Met	Thr	Cys	Thr	Lys	Asn	Pro	Gln	Asn	Leu	Asn	Gln	Ile	His	Glu	Glu
1				5					10					15	
Thr	Ala	Lys	Lys	Ala	Gln	Asn	Leu	Val	Leu	Pro	Asn	Arg	Lys	Ser	Pro
				20					25					30	
Ser	Pro	Val	Ala	Pro	His	Pro	Ser	Thr	Phe	Val	Ala	Thr	Pro	Ala	Ser
				35					40					45	
His	Asn	Leu	Val	Asn	Gln	Thr	Asn	Gly	Thr	Thr	Lys	Glu	Ser	Ala	Leu
				50					55					60	
Leu	Leu	His	Val	Leu	Leu	Met	Val	Pro	Asp	Gly	Lys	Asp	Phe	Ile	Ser
				65					70					75	
Gly	Glu	Ser	Glu	Lys	Gln	Ser	Pro	Cys	Asn	Val	Tyr	Leu	Asn	Cys	Lys
									85					90	
Leu	Phe	Ser	Thr	Glu	Glu	Val	Thr	Arg	Ser	Val	Ile	Ala	Trp	Gly	Thr
									100					105	
Thr	Gln	Pro	Val	Phe	Asn	Phe	Ser	Gln	Val	Ile	Pro	Val	Ser	Leu	Ser
									115					120	
Ser	Lys	Tyr	Leu	Glu	Arg	Leu	Lys	Asn	Asn	Val	Met	Val	Ile	Glu	Thr
														130	
Trp	Asn	Lys	Val	Arg	Ser	Pro	Gly	Gln	Asp	Lys	Leu	Leu	Gly	Leu	Val
														145	
Lys	Leu	Pro	Leu	His	Gln	Phe	Tyr	Met	Ser	Phe	Lys	Asp	Ala	Lys	Ile
														155	
														160	
														165	
Ser	Arg	Leu	Leu	Leu	Asp	Ala	Gln	Tyr	Pro	Val	Val	Ala	Val	Asp	Ser
														170	
														175	
														180	
Tyr	Met	Pro	Val	Ile	Asp	Val	Phe	Ser	Gly	His	Gln	Asn	Gly	Ser	Leu
														185	
														190	

195	200	205
Arg Val Phe Leu Ala Met Gly Ser Ser Asn Gln Ile Met Ala Leu Gln		
210	215	220
Arg Leu Lys Asn Glu Glu Gly Thr Leu Pro Pro Phe Ser Pro Arg Pro		
225	230	235
240		
Ala His Phe Leu Asp Gln Pro Thr Ala Ala Ser Val Ala Met Ala Glu		
245	250	255
Asp Arg Gly Asn Gly Leu Met Glu His Cys Phe Glu Ile His Ile Glu		
260	265	270
Met Val Lys Gly Leu Ala Pro Leu Gln Ala Thr Val Trp Gly Glu Ala		
275	280	285
Asp Cys Tyr Val Gln Tyr Tyr Phe Pro Val Gln His Ser Gln Ser Ser		
290	295	300
Val Leu Lys Gly Pro Glu Phe Leu Glu Asn Gly Ile Thr Leu Lys Pro		
305	310	315
320		
Phe Arg Thr Ala Thr Thr Leu Cys Val Pro Asp Pro Ile Phe Asn Ser		
325	330	335
Glu His His His Ser Leu Leu Leu Pro Ala Glu Val Pro Val Gln Arg		
340	345	350
Leu Leu Leu Ser Ala Phe Ser Ala Gln Gly Leu Val Pro Gly Gly Gly		
355	360	365
Val Gln Phe Glu Ile Trp Cys Arg Tyr Tyr Tyr Pro Asn Val Arg Asp		
370	375	380
Gln Lys Val Ala Lys Gly Thr Leu Pro Leu Ser Arg Ile Cys Ala Met		
385	390	395
400		
Val Thr Thr Gln His Arg Glu Asp Val Gly Ile Gln Thr Phe Asn Leu		
405	410	415
Pro Leu Thr Pro Arg Ile Glu Asn Arg Lys Glu Leu Arg Asn Gln Ser		
420	425	430

Ser Gly Leu Leu Asp Val Gly Leu Arg Tyr Arg Arg Ser Pro Arg Thr  
 435 440 445  
 Ala Glu Gly Val Leu Ala Ala Arg Thr Val Ser Ile Ser Val Gln Ile  
 450 455 460  
 Ile Arg Ala Cys Gly Leu Gln Ala Ala Ala Lys Ala Leu Ala Glu Gln  
 465 470 475 480  
 Glu Pro Ala Leu Gln Phe Ser Ala Thr Val Gly Val Asn Ala Ser Val  
 485 490 495  
 Thr Thr His Leu Ser Phe Leu Pro Gln Gly Glu Gln Arg Arg Thr His  
 500 505 510  
 Pro Val Ala Cys Ser Phe Cys Pro Glu Phe Ser His His Val Glu Phe  
 515 520 525  
 Thr Cys Asn Leu Val Thr Gln His Cys Ser Gly Glu Ala Cys Phe Leu  
 530 535 540  
 Ala Glu Leu Leu Glu Phe Ala Glu Val Ile Phe Ala Val Tyr His Glu  
 545 550 555 560  
 Asn Thr Lys Ser Ala Ser Asp Ile Ile Ser Ile Glu Ser Cys Lys Glu  
 565 570 575  
 Tyr Leu Leu Gly Val Val Lys Val Pro Thr Lys Glu Leu Leu Ile Lys  
 580 585 590  
 Arg Ser Gly Ile Thr Gly Trp Tyr Pro Ile Ile Leu Pro Glu Asp Gly  
 595 600 605  
 Gly Leu Pro His Gly Leu Glu Leu Met Gln Lys Ile Val Gly Gly Leu  
 610 615 620  
 Glu Leu Ser Ile Ser Phe Thr His Arg Gly Asp Arg Glu Arg Val Leu  
 625 630 635 640  
 Glu Ala Ala Glu His Leu Gly Trp Ser Phe Glu Asn Ser Leu Lys Asp  
 645 650 655  
 Phe Val Arg Met Asp Glu Gly Glu Pro Ala Thr Val Thr Ile Ser Thr

660 665 670  
Pro Arg Leu Trp Leu Pro Ile His Cys Val Leu Leu Ala Gly His Asn  
675 680 685  
His Ile His Lys Asn Thr Tyr Cys Tyr Leu Arg Tyr Lys Phe Tyr Asp  
690 695 700  
His Glu Ala Phe Trp Thr Pro Leu Lys Lys Pro Lys Glu Ser Val Asn  
705 710 715 720  
Lys Lys Gln Ile Met Val Thr Phe Lys Ala Ser Lys Arg Ala Glu Val  
725 730 735  
Thr Arg Gly Pro Ser Leu Leu Trp Tyr Phe Arg Glu Glu Arg Leu Glu  
740 745 750  
Ile Gln Val Trp Arg Ala Tyr Gly Asn Asp Ser Val Glu Arg Pro His  
755 760 765  
Gln Thr Asp Ser Trp Ile Gly Ser Ala Tyr Val Asp Leu Ala Arg Leu  
770 775 780  
Gly Glu Arg Ser Ala Arg Thr Leu Thr Val Ser Gly Val Tyr Pro Leu  
785 790 795 800  
Phe Gly Arg Asn Ala Ser Asn Leu Ser Gly Ala Ala Leu Arg Val His  
805 810 815  
Val Val Leu Ser Ser Leu Ser Ser His Leu Glu Pro Thr His Glu Leu  
820 825 830  
Asp Ser Met Asp Cys Ser Ser His Ser Glu Ser Glu Gln Leu Pro Arg  
835 840 845  
Arg Asn Asp Glu Val Gln Leu Ser Pro Pro Glu Val Ile Ser Cys His  
850 855 860  
Gln Lys Ser Pro Ala Ser Thr Gln Val Pro Cys Ser Ser Thr Thr Ala  
865 870 875 880  
Glu Val Arg Leu Thr Arg Glu Gly Pro Ala Asp Leu Asp Gly Thr Phe  
885 890 895



Ala Val Ser Ile Leu Val Glu Arg Ala Met His Leu Ser Leu Lys Gly  
900 905 910  
Ser Pro Leu Thr Glu Arg Lys Val Ser Ile Pro Ser Cys Cys Val Ser  
915 920 925  
Phe Ala Thr Ala Asp Glu Ser Ser Pro Val Tyr Thr Gln Val Val Glu  
930 935 940  
Asn Thr Asp Ser Pro Ile Trp Asn Phe Gln Gln Gln Ser Arg Leu Ser  
945 950 955 960  
Lys Glu Leu Leu Leu Asp Pro Gln Gln Thr Leu Val Phe Lys Val Trp  
965 970 975  
His Lys Gly Asp Glu Glu Arg Val Ile Gly Phe Ala Ser Val Asp Leu  
980 985 990  
Ser Pro Leu Leu Ser Gly Phe Gln Phe Val Cys Gly Trp Tyr Asn Ile  
995 1000 1005  
Thr Asp Phe Ser Gly Glu Cys Gln Gly Gln Ile Lys Val Ala Val Ser  
1010 1015 1020  
Pro Leu Glu Ser Leu Ile His Phe Lys Glu Glu Arg Gln Glu Arg Arg  
1025 1030 1035 1040  
Gly Val Glu Thr Ser Lys Ser Leu Ile Pro Ile Tyr Ser Pro Phe Ser  
1045 1050 1055  
Phe Pro Ala Ser Asp Thr Tyr Ala Ala Phe Ser Ser His Met Ala Arg  
1060 1065 1070  
Gln Thr Leu Asp Gln Leu Ala His Ala Ser Ser Lys Glu Leu Asp Phe  
1075 1080 1085  
Ser Ser Pro Gly Arg Ser Asp Thr Thr Arg Ser Gln Ala Ser Arg His  
1090 1095 1100  
Glu Glu His Val Gln Asn Ile Arg Arg Phe His Glu Ser Leu His Leu  
1105 1110 1115 1120  
Gln Gly Glu Ala Pro Leu Pro Cys Asp Asp Lys Leu Thr Thr Ser Pro

1125	1130	1135	
Leu Ser Ser Gln Thr Ser Ile Leu Thr Ser Leu Arg Lys Asn Leu Ser			
1140	1145	1150	
Glu Leu Asp Gln Ile Gln Arg Tyr Phe Arg Gln Lys Leu Thr Lys Pro			
1155	1160	1165	
Phe Leu Pro Leu Ser Pro Gln Thr Gln Thr Ala Ile Ser Gln His Gln			
1170	1175	1180	
Glu Ser Cys Arg Asp His Leu Gly Pro Gly Ala Ser Ser Leu Asp Pro			
1185	1190	1195	1200
Gly Ser Gln Cys Ile Leu Glu Lys Ser Ser Asn Leu Val Leu Gln Val			
1205	1210	1215	
Ser Ser Leu Ile Thr Gly Ser Tyr			
1220			

&lt;210&gt; 3786

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3786

Met Thr Glu Met Ala Arg Cys Gln Trp Gln Val Pro Pro His Gly Leu
1 5 10 15
Ala Gln Pro Pro Val Cys Ser Gln Gln Gly Gln Thr Thr Arg Trp Gly
20 25 30
Tyr Ser Ile Leu His Leu Leu Leu Cys Arg Ala Pro Gln Gly Thr Asn
35 40 45
Asn Ser Ser Gln Val Trp Pro Phe Pro Thr Leu Ser Pro Gln Leu Val
50 55 60

Ser Ser Ala Tyr Lys Glu Thr Val Thr Ser Ser Ile Phe Trp Lys Gly  
65 70 75 80  
Ser Glu Thr Gly Leu Leu Ser Phe Arg Val Ala Thr Arg Phe Ser Ile  
85 90 95  
Leu Gln Thr Leu Gly Thr Thr Ser His Leu Pro Leu Thr Gly Pro Gly  
100 105 110  
Leu Ser Lys Val Ser Gly Ala Gln Asp Val Thr Arg Ala Thr Ser Thr  
115 120 125  
Pro Ser Arg Thr Phe Asp Val Ser Val Asp Leu Ala Phe Gly Val Gln  
130 135 140  
Ile Ile Gln Ala Leu Gln Asn Leu Pro Gln Asp Arg Gly Asn Val Cys  
145 150 155 160  
Leu Leu Gln Gly Thr Trp Phe Lys Leu Glu Arg Lys Val Arg Gln Gln  
165 170 175  
Gly Leu Ser Ser Cys Pro Arg Pro Asn Ala  
180 185

&lt;210&gt; 3787

&lt;211&gt; 773

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3787

Met Glu Glu Glu Leu Asp Lys Met Glu Arg Glu Ala Cys Cys Phe Gly  
1 5 10 15  
Ser Glu Asp Glu Ser Ser Ser Lys Ala Glu Thr Glu Tyr Ser Phe Asp  
20 25 30  
Asp Trp Asp Trp Gln Asn Gly Ser Leu Ser Ser Leu Ser Leu Pro Glu

35	40	45
Ser Thr Arg Glu Ala Lys Ser Asn Leu Asn Asn Met Ser Thr Thr Glu		
50	55	60
Glu Tyr Leu Ile Ser Lys Cys Val Leu Asp Leu Lys Ile Met Gln Thr		
65	70	75
Ile Met His Glu Asn Asp Asp Arg Leu Arg Asn Ile Glu Gln Ile Leu		
85	90	95
Asp Glu Val Glu Met Lys Gln Lys Glu Gln Glu Glu Arg Met Ser Leu		
100	105	110
Trp Ala Thr Ser Arg Glu Phe Thr Asn Ala Tyr Lys Leu Pro Leu Ala		
115	120	125
Val Gly Pro Pro Ser Leu Asn Tyr Ile Pro Pro Val Leu Gln Leu Ser		
130	135	140
Gly Gly Gln Lys Pro Asp Thr Ser Gly Asn Tyr Pro Thr Leu Pro Arg		
145	150	155
Phe Pro Arg Met Leu Pro Thr Leu Cys Asp Pro Gly Lys Gln Asn Thr		
165	170	175
Asp Glu Gln Phe Gln Cys Thr Gln Gly Ala Lys Asp Ser Leu Glu Thr		
180	185	190
Ser Arg Ile Gln Asn Thr Ser Ser Gln Gly Arg Pro Arg Glu Ser Thr		
195	200	205
Ala Gln Ala Lys Ala Thr Gln Phe Asn Ser Ala Leu Phe Thr Leu Ser		
210	215	220
Ser His Arg Gln Gly Pro Ser Ala Ser Pro Ser Cys His Trp Asp Ser		
225	230	235
Thr Arg Met Ser Val Glu Pro Val Ser Ser Glu Ile Tyr Asn Ala Glu		
245	250	255
Ser Arg Asn Lys Asp Asp Gly Lys Val His Leu Lys Trp Lys Met Glu		
260	265	270

Val Lys Glu Met Ala Lys Lys Ala Ala Thr Gly Gln Leu Thr Val Pro  
275 280 285

Pro Trp His Pro Gln Ser Ser Leu Thr Leu Glu Ser Glu Ala Glu Asn  
290 295 300

Glu Pro Asp Ala Leu Leu Gln Pro Pro Ile Arg Ser Pro Glu Asn Thr  
305 310 315 320

Asp Trp Gln Arg Val Ile Glu Tyr His Arg Glu Asn Asp Glu Pro Arg  
325 330 335

Gly Asn Gly Lys Phe Asp Lys Thr Gly Asn Asn Asp Cys Asp Ser Asp  
340 345 350

Gln His Gly Arg Gln Pro Arg Leu Gly Ser Phe Thr Ser Ile Arg His  
355 360 365

Pro Ser Pro Arg Gln Lys Glu Gln Pro Glu His Ser Glu Ala Phe Gln  
370 375 380

Ala Ser Ser Asp Thr Leu Val Ala Val Glu Lys Ser Tyr Ser His Gln  
385 390 395 400

Ser Met Gln Ser Thr Cys Ser Pro Glu Ser Ser Glu Asp Ile Thr Asp  
405 410 415

Glu Phe Leu Thr Pro Asp Asp Glu Tyr Phe Tyr Ser Ser Thr Ala Gln  
420 425 430

Glu Asn Leu Ala Leu Glu Thr Ser Ser Pro Ile Glu Glu Asp Phe Glu  
435 440 445

Gly Ile Gln Gly Ala Phe Ala Gln Pro Gln Val Ser Gly Glu Glu Lys  
450 455 460

Phe Gln Met Arg Lys Ile Leu Gly Lys Asn Ala Glu Ile Leu Pro Arg  
465 470 475 480

Ser Gln Phe Gln Pro Val Arg Ser Thr Glu Asp Glu Gln Glu Glu Thr  
485 490 495

Ser Lys Glu Ser Pro Lys Glu Leu Lys Glu Lys Asp Ile Ser Leu Thr

500 505 510  
Asp Ile Gln Asp Leu Ser Ser Ile Ser Tyr Glu Pro Asp Ser Ser Phe  
515 520 525  
Lys Glu Ala Ser Cys Lys Thr Pro Lys Ile Asn His Ala Pro Thr Ser  
530 535 540  
Val Ser Thr Pro Leu Ser Pro Gly Ser Val Ser Ser Ala Ala Ser Gln  
545 550 555 560  
Tyr Lys Asp Cys Leu Glu Ser Ile Thr Phe Gln Val Lys Thr Glu Phe  
565 570 575  
Ala Ser Cys Trp Asn Ser Gln Glu Phe Ile Gln Thr Leu Ser Asp Asp  
580 585 590  
Phe Ile Ser Val Arg Glu Arg Ala Lys Lys Leu Asp Ser Leu Leu Thr  
595 600 605  
Ser Ser Glu Thr Pro Pro Ser Arg Leu Thr Gly Leu Lys Arg Leu Ser  
610 615 620  
Ser Phe Ile Gly Ala Gly Ser Pro Ser Leu Val Lys Ala Cys Asp Ser  
625 630 635 640  
Ser Pro Pro His Ala Thr Gln Arg Arg Ser Leu Pro Lys Val Glu Ala  
645 650 655  
Phe Ser Gln His His Ile Asp Glu Leu Pro Pro Pro Ser Gln Glu Leu  
660 665 670  
Leu Asp Asp Ile Glu Leu Leu Lys Gln Gln Gln Gly Ser Ser Thr Val  
675 680 685  
Leu His Glu Asn Thr Ala Ser Asp Gly Gly Gly Thr Ala Asn Asp Gln  
690 695 700  
Arg His Leu Glu Glu Gln Glu Thr Asp Ser Lys Lys Glu Asp Ser Ser  
705 710 715 720  
Met Leu Leu Ser Lys Glu Thr Glu Asp Leu Gly Glu Asp Thr Glu Arg  
725 730 735

Ala His Ser Thr Leu Asp Glu Asp Leu Glu Arg Trp Leu Gln Pro Pro  
 740 745 750  
 Glu Glu Ser Val Glu Leu Gln Asp Leu Pro Lys Gly Ser Glu Arg Glu  
 755 760 765  
 Thr Asn Ile Lys Asp  
 770

<210> 3788

<211> 969

<212> PRT

<213> Homo sapiens

<400> 3788

Met Val Lys Leu Val Leu Leu Ser Ile Val Leu Leu Lys Val Thr Val  
 1 5 10 15  
 Pro Lys Leu Ser Asn Tyr Leu Leu Gln Leu Asp Phe Met Pro Ile His  
 20 25 30  
 Arg Gly Ile Leu Ala Ile Ala Trp Ser Met Ala Asp Pro Glu Leu Leu  
 35 40 45  
 Leu Ser Cys Gly Lys Asp Ala Arg Ile Leu Cys Ser Asn Pro Asn Thr  
 50 55 60  
 Gly Glu Val Leu Tyr Glu Leu Pro Thr Asn Thr Gln Trp Cys Phe Asp  
 65 70 75 80  
 Ile Gln Trp Cys Pro Arg Asn Pro Ala Val Leu Ser Ala Ala Ser Phe  
 85 90 95  
 Asp Gly Arg Ile Ser Val Tyr Ser Ile Met Gly Gly Ser Thr Asp Gly  
 100 105 110  
 Leu Arg Gln Lys Gln Val Asp Lys Leu Ser Ser Ser Phe Gly Asn Leu

115 120 125  
Asp Pro Phe Gly Thr Gly Gln Pro Leu Pro Pro Leu Gln Ile Pro Gln  
130 135 140  
Gln Thr Ala Gln His Ser Ile Val Leu Pro Leu Lys Lys Pro Pro Lys  
145 150 155 160  
Trp Ile Arg Arg Pro Val Gly Ala Ser Phe Ser Phe Gly Gly Lys Leu  
165 170 175  
Val Thr Phe Glu Asn Val Arg Met Pro Ser His Gln Gly Ala Glu Gln  
180 185 190  
Gln Gln Gln Gln His His Val Phe Ile Ser Gln Val Val Thr Glu Lys  
195 200 205  
Glu Phe Leu Ser Arg Ser Asp Gln Leu Gln Gln Ala Val Gln Ser Gln  
210 215 220  
Gly Phe Ile Asn Tyr Cys Gln Lys Lys Ile Asp Ala Ser Gln Thr Glu  
225 230 235 240  
Phe Glu Lys Asn Val Trp Ser Phe Leu Lys Val Asn Phe Glu Asp Asp  
245 250 255  
Ser Arg Gly Lys Tyr Leu Glu Leu Leu Gly Tyr Arg Lys Glu Asp Leu  
260 265 270  
Gly Lys Lys His Ile Lys Glu Glu Lys Glu Glu Ser Glu Phe Leu Pro  
275 280 285  
Ser Ser Gly Gly Thr Phe Asn Ile Ser Val Ser Gly Asp Ile Asp Gly  
290 295 300  
Leu Ile Thr Gln Ala Leu Leu Thr Gly Asn Phe Glu Ser Ala Val Asp  
305 310 315 320  
Leu Cys Leu His Asp Asn Arg Met Ala Asp Ala Ile Ile Leu Ala Ile  
325 330 335  
Ala Gly Gly Gln Glu Leu Leu Ala Arg Thr Gln Lys Lys Tyr Phe Ala  
340 345 350



Lys Ser Gln Ser Lys Ile Thr Arg Leu Ile Thr Ala Val Val Met Lys  
355 360 365  
Asn Trp Lys Glu Ile Val Glu Ser Cys Asp Leu Lys Asn Trp Arg Glu  
370 375 380  
Ala Leu Ala Ala Val Leu Thr Tyr Ala Lys Pro Asp Glu Phe Ser Ala  
385 390 395 400  
Leu Cys Asp Leu Leu Gly Thr Arg Leu Glu Asn Glu Gly Asp Ser Leu  
405 410 415  
Leu Gln Thr Gln Ala Cys Leu Cys Tyr Ile Cys Ala Gly Asn Val Glu  
420 425 430  
Lys Leu Val Ala Cys Trp Thr Lys Ala Gln Asp Gly Ser His Pro Leu  
435 440 445  
Ser Leu Gln Asp Leu Ile Glu Lys Val Val Ile Leu Arg Lys Ala Val  
450 455 460  
Gln Leu Thr Gln Ala Met Asp Thr Ser Thr Val Gly Val Leu Leu Ala  
465 470 475 480  
Ala Lys Met Ser Gln Tyr Ala Asn Leu Leu Ala Ala Gln Gly Ser Ile  
485 490 495  
Ala Ala Ala Leu Ala Phe Leu Pro Asp Asn Thr Asn Gln Pro Asn Ile  
500 505 510  
Met Gln Leu Arg Asp Arg Leu Cys Arg Ala Gln Gly Glu Pro Val Ala  
515 520 525  
Gly His Glu Ser Pro Lys Ile Pro Tyr Glu Lys Gln Gln Leu Pro Lys  
530 535 540  
Gly Arg Pro Gly Pro Val Ala Gly His His Gln Met Pro Arg Val Gln  
545 550 555 560  
Thr Gln Gln Tyr Tyr Pro His Val Arg Ile Ala Pro Thr Val Thr Thr  
565 570 575  
Trp Ser Asn Lys Thr Pro Thr Ala Leu Pro Ser His Pro Pro Ala Ala

580 585 590  
Ser Pro Ser Asp Thr Gln Gly Glu Asn Pro Pro Pro Gly Phe Ile  
595 600 605  
Met His Gly Asn Val Asn Pro Asn Ala Ala Gly Gln Leu Pro Thr Ser  
610 615 620  
Pro Gly His Met His Thr Gln Val Pro Pro Tyr Pro Gln Pro Gln Pro  
625 630 635 640  
Tyr Gln Pro Ala Gln Pro Tyr Pro Phe Gly Thr Gly Gly Ser Ala Met  
645 650 655  
Tyr Arg Pro Gln Gln Pro Val Ala Pro Pro Thr Ser Asn Ala Tyr Pro  
660 665 670  
Asn Thr Pro Tyr Ile Ser Ser Ala Ser Ser Tyr Thr Gly Gln Ser Gln  
675 680 685  
Leu Tyr Ala Ala Gln His Gln Ala Ser Ser Pro Thr Ser Ser Pro Ala  
690 695 700  
Thr Ser Phe Pro Pro Pro Pro Ser Ser Gly Ala Ser Phe Gln His Gly  
705 710 715 720  
Gly Pro Gly Ala Pro Pro Ser Ser Ser Ala Tyr Ala Leu Pro Pro Gly  
725 730 735  
Thr Thr Gly Pro Gln Asn Gly Trp Asn Asp Pro Pro Ala Leu Asn Arg  
740 745 750  
Val Pro Lys Lys Lys Lys Met Pro Glu Asn Phe Met Pro Pro Val Pro  
755 760 765  
Ile Thr Ser Pro Ile Met Asn Pro Leu Gly Asp Pro Gln Ser Gln Met  
770 775 780  
Leu Gln Gln Gln Pro Ser Ala Pro Val Pro Leu Ser Ser Gln Ser Ser  
785 790 795 800  
Phe Pro Gln Pro His Leu Pro Gly Gly Gln Pro Phe His Gly Val Gln  
805 810 815

Gln Pro Leu Gly Gln Thr Gly Met Pro Pro Ser Phe Ser Lys Pro Asn  
                     820                    825                    830  
 Ile Glu Gly Ala Pro Gly Ala Pro Ile Gly Asn Thr Phe Gln His Val  
                     835                    840                    845  
 Gln Ser Leu Pro Thr Lys Lys Ile Thr Lys Lys Pro Ile Pro Asp Glu  
                     850                    855                    860  
 His Leu Ile Leu Lys Thr Thr Phe Glu Asp Leu Ile Gln Arg Cys Leu  
                     865                    870                    875                    880  
 Ser Ser Ala Thr Asp Pro Gln Thr Lys Arg Lys Leu Asp Asp Ala Ser  
                     885                    890                    895  
 Lys Arg Leu Glu Phe Leu Tyr Asp Lys Leu Arg Glu Gln Thr Leu Ser  
                     900                    905                    910  
 Pro Thr Ile Thr Ser Gly Leu His Asn Ile Ala Arg Ser Ile Glu Thr  
                     915                    920                    925  
 Arg Asn Tyr Ser Glu Gly Leu Thr Met His Thr His Ile Val Ser Thr  
                     930                    935                    940  
 Ser Asn Phe Ser Glu Thr Ser Ala Phe Met Pro Val Leu Lys Val Val  
                     945                    950                    955                    960  
 Leu Thr Gln Ala Asn Lys Leu Gly Val  
                     965

<210> 3789

<211> 1488

<212> PRT

<213> Homo sapiens

<400> 3789

Met Val Lys Gly Ser Val Glu Asn Tyr Arg Leu Ile His Asn Trp Val

1	5	10	15
Met Ala Gln His	Met Gln Ser His	Ala Pro Tyr Lys	Trp Asp Tyr Trp
20	25	30	
Pro His Glu Asp	Val Arg Ala Glu	Cys Arg Phe Val	Gly Leu Thr Asn
35	40	45	
Leu Gly Ala Thr	Cys Tyr Leu Ala	Ser Thr Ile Gln	Gln Leu Tyr Met
50	55	60	
Ile Pro Glu Ala	Arg Gln Ala Val	Phe Thr Ala Lys	Tyr Ser Glu Asp
65	70	75	80
Met Lys His Lys	Thr Thr Leu Leu	Glu Leu Gln Lys	Met Phe Thr Tyr
85	90	95	
Leu Met Glu Ser	Glu Cys Lys Ala	Tyr Asn Pro Arg	Pro Phe Cys Lys
100	105	110	
Thr Tyr Thr Met	Asp Lys Gln Pro	Leu Asn Thr Gly	Glu Gln Lys Asp
115	120	125	
Met Thr Glu Phe	Phe Thr Asp Leu	Ile Thr Lys Ile	Glu Glu Met Ser
130	135	140	
Pro Glu Leu Lys	Asn Thr Val Lys	Ser Leu Phe Gly	Gly Val Ile Thr
145	150	155	160
Asn Asn Val Val	Ser Leu Asp Cys	Glu His Val Ser	Gln Thr Ala Glu
165	170	175	
Glu Phe Tyr Thr	Val Arg Cys Gln	Val Ala Asp Met	Lys Asn Ile Tyr
180	185	190	
Glu Ser Leu Asp	Glu Val Thr Ile	Lys Asp Thr Leu	Glu Gly Asp Asn
195	200	205	
Met Tyr Thr Cys	Ser His Cys Gly	Lys Lys Val Arg	Ala Glu Lys Arg
210	215	220	
Ala Cys Phe Lys	Lys Leu Pro Arg	Ile Leu Ser Phe	Asn Thr Met Arg
225	230	235	240

出証特 2 0 0 4 - 3 0 5 9 6 6 0

465                      470                      475                      480  
Leu Leu Thr Lys Gln Phe Asn Asn Ser Gln Ala Ala Cys Glu Trp Phe  
                                 485                      490                      495  
Leu Asp Arg Met Ala Asp Asp Asp Trp Trp Pro Met Gln Ile Leu Ile  
                                 500                      505                      510  
Lys Cys Pro Asn Gln Ile Val Arg Gln Met Phe Gln Arg Leu Cys Ile  
                                 515                      520                      525  
His Val Ile Gln Arg Leu Arg Pro Val His Ala His Leu Tyr Leu Gln  
                                 530                      535                      540  
Pro Gly Met Glu Asp Gly Ser Asp Asp Met Asp Thr Ser Val Glu Asp  
545                      550                      555                      560  
Ile Gly Gly Arg Ser Cys Val Thr Arg Phe Val Arg Thr Leu Leu Leu  
                                 565                      570                      575  
Ile Met Glu His Gly Val Lys Pro His Ser Lys His Leu Thr Glu Tyr  
                                 580                      585                      590  
Phe Ala Phe Leu Tyr Glu Phe Ala Lys Met Gly Glu Glu Glu Ser Gln  
                                 595                      600                      605  
Phe Leu Leu Ser Leu Gln Ala Ile Ser Thr Met Val His Phe Tyr Met  
                                 610                      615                      620  
Gly Thr Lys Gly Pro Glu Asn Pro Gln Val Glu Val Leu Ser Glu Glu  
625                      630                      635                      640  
Glu Gly Glu Glu Glu Glu Glu Glu Asp Ile Leu Ser Leu Ala Glu  
                                 645                      650                      655  
Glu Lys Tyr Arg Pro Ala Ala Leu Glu Lys Met Ile Ala Leu Val Ala  
                                 660                      665                      670  
Leu Leu Val Glu Gln Ser Arg Ser Glu Arg His Leu Thr Leu Ser Gln  
                                 675                      680                      685  
Thr Asp Met Ala Ala Leu Thr Gly Gly Lys Gly Phe Pro Phe Leu Phe  
                                 690                      695                      700

Gln His Ile Arg Asp Gly Ile Asn Ile Arg Gln Thr Cys Asn Leu Ile  
705 710 715 720  
Phe Ser Leu Cys Arg Tyr Asn Asn Arg Leu Ala Glu His Ile Val Ser  
725 730 735  
Met Leu Phe Thr Ser Ile Ala Lys Leu Thr Pro Glu Ala Ala Asn Pro  
740 745 750  
Phe Phe Lys Leu Leu Thr Met Leu Met Glu Phe Ala Gly Gly Pro Pro  
755 760 765  
Gly Met Pro Pro Phe Ala Ser Tyr Ile Leu Gln Arg Ile Trp Glu Val  
770 775 780  
Ile Glu Tyr Asn Pro Ser Gln Cys Leu Asp Trp Leu Ala Val Gln Thr  
785 790 795 800  
Pro Arg Asn Lys Leu Ala His Ser Trp Val Leu Gln Asn Met Glu Asn  
805 810 815  
Trp Val Glu Arg Phe Leu Leu Ala His Asn Tyr Pro Arg Val Arg Thr  
820 825 830  
Ser Ala Ala Tyr Leu Leu Val Ser Leu Ile Pro Ser Asn Ser Phe Arg  
835 840 845  
Gln Met Phe Arg Ser Thr Arg Ser Leu His Ile Pro Thr Arg Asp Leu  
850 855 860  
Pro Leu Ser Pro Asp Thr Thr Val Val Leu His Gln Val Tyr Asn Val  
865 870 875 880  
Leu Leu Gly Leu Leu Ser Arg Ala Lys Leu Tyr Val Asp Ala Ala Val  
885 890 895  
His Gly Thr Thr Lys Leu Val Pro Tyr Phe Ser Phe Met Thr Tyr Cys  
900 905 910  
Leu Ile Ser Lys Thr Glu Lys Leu Met Phe Ser Thr Tyr Phe Met Asp  
915 920 925  
Leu Trp Asn Leu Phe Gln Pro Lys Leu Ser Glu Pro Ala Ile Ala Thr

930                                      935                                      940  
Asn His Asn Lys Gln Ala Leu Leu Ser Phe Trp Tyr Asn Val Cys Ala  
945                                      950                                      955                                      960  
Asp Cys Pro Glu Asn Ile Arg Leu Ile Val Gln Asn Pro Val Val Thr  
   965                                      970                                      975  
Lys Asn Ile Ala Phe Asn Tyr Ile Leu Ala Asp His Asp Asp Gln Asp  
   980                                      985                                      990  
Val Val Leu Phe Asn Arg Gly Met Leu Pro Ala Tyr Tyr Gly Ile Leu  
   995                                      1000                                      1005  
Arg Leu Cys Cys Glu Gln Ser Pro Ala Phe Thr Arg Gln Leu Ala Ser  
1010                                      1015                                      1020  
His Gln Asn Ile Gln Trp Ala Phe Lys Asn Leu Thr Pro His Ala Ser  
1025                                      1030                                      1035                                      1040  
Gln Tyr Pro Gly Ala Val Glu Glu Leu Phe Asn Leu Met Gln Leu Phe  
   1045                                      1050                                      1055  
Ile Ala Gln Arg Pro Asp Met Arg Glu Glu Glu Leu Glu Asp Ile Lys  
   1060                                      1065                                      1070  
Gln Phe Lys Lys Thr Thr Ile Ser Cys Tyr Leu Arg Cys Leu Asp Gly  
   1075                                      1080                                      1085  
Arg Ser Cys Trp Thr Thr Leu Ile Ser Ala Phe Arg Ile Leu Leu Glu  
1090                                      1095                                      1100  
Ser Asp Glu Asp Arg Leu Leu Val Val Phe Asn Arg Gly Leu Ile Leu  
1105                                      1110                                      1115                                      1120  
Met Thr Glu Ser Phe Asn Thr Leu His Met Met Tyr His Glu Ala Thr  
   1125                                      1130                                      1135  
Ala Cys His Val Thr Gly Asp Leu Val Glu Leu Leu Ser Ile Phe Leu  
   1140                                      1145                                      1150  
Ser Val Leu Lys Ser Thr Arg Pro Tyr Leu Gln Arg Lys Asp Val Lys  
1155                                      1160                                      1165



Gln Ala Leu Ile Gln Trp Gln Glu Arg Ile Glu Phe Ala His Lys Leu  
1170 1175 1180  
Leu Thr Leu Leu Asn Ser Tyr Ser Pro Pro Glu Leu Arg Asn Ala Cys  
1185 1190 1195 1200  
Ile Asp Val Leu Lys Glu Leu Val Leu Leu Ser Pro His Asp Phe Leu  
1205 1210 1215  
His Thr Leu Val Pro Phe Leu Gln His Asn His Cys Thr Tyr His His  
1220 1225 1230  
Ser Asn Ile Pro Met Ser Leu Gly Pro Tyr Phe Pro Cys Arg Glu Asn  
1235 1240 1245  
Ile Lys Leu Ile Gly Gly Lys Ser Asn Ile Arg Pro Pro Arg Pro Glu  
1250 1255 1260  
Leu Asn Met Cys Leu Leu Pro Thr Met Val Glu Thr Ser Lys Gly Lys  
1265 1270 1275 1280  
Asp Asp Val Tyr Asp Arg Met Leu Leu Asp Tyr Phe Phe Ser Tyr His  
1285 1290 1295  
Gln Phe Ile His Leu Leu Cys Arg Val Ala Ile Asn Cys Glu Lys Phe  
1300 1305 1310  
Thr Glu Thr Leu Val Lys Leu Ser Val Leu Val Ala Tyr Glu Gly Leu  
1315 1320 1325  
Pro Leu His Leu Ala Leu Phe Pro Lys Leu Trp Thr Glu Leu Cys Gln  
1330 1335 1340  
Thr Gln Ser Ala Met Ser Lys Asn Cys Ile Lys Leu Leu Cys Glu Asp  
1345 1350 1355 1360  
Pro Val Phe Ala Glu Tyr Ile Lys Cys Ile Leu Met Asp Glu Arg Thr  
1365 1370 1375  
Phe Leu Asn Asn Asn Ile Val Tyr Thr Phe Met Thr His Phe Leu Leu  
1380 1385 1390  
Lys Val Gln Ser Gln Val Phe Ser Glu Ala Asn Cys Ala Asn Leu Ile

出証特 2 0 0 4 - 3 0 5 9 6 6 0

Val	Thr	Asp	His	Ser	Val	Arg	Asp	Gln	Asp	His	Pro	Asp	Gly	Gln	Glu
					85				90					95	
Asn	Asp	Ser	Thr	Lys	Asn	Glu	Ile	Lys	Ile	Glu	Thr	Glu	Ser	Gln	Ser
					100				105					110	
Ser	Tyr	Met	Glu	Thr	Glu	Glu	Leu	Ser	Ser	Asn	Gln	Glu	Asp	Ala	Val
					115				120					125	
Ile	Val	Glu	Gln	Pro	Glu	Val	Ile	Pro	Leu	Thr	Glu	Asp	Gln	Glu	Glu
					130				135					140	
Lys	Glu	Gly	Glu	Lys	Ala	Pro	Gly	Glu	Asp	Thr	Pro	Arg	Met	Pro	Gly
					145				150					155	
Lys	Ser	Glu	Gly	Ser	Ser	Asp	Leu	Glu	Asn	Thr	Pro	Gly	Pro	Asp	Ala
					165				170					175	
Gly	Ala	Gln	Asp	Glu	Ala	Lys	Glu	Gln	Arg	Asn	Gly	Thr	Lys		
					180				185					190	

&lt;210&gt; 3791

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3791

Met	Gly	Phe	Leu	Pro	Asp	Tyr	Phe	Leu	Val	Phe	Ser	Leu	Thr	Glu	Cys
1				5					10					15	
His	Lys	Gly	Leu	Gly	Leu	Trp	Phe	Pro	Thr	Gly	Lys	Glu	Thr	Ser	Asn
				20				25					30		
Phe	Ala	Ser	Leu	Ser	Ser	Phe	Tyr	Met	Thr	Met	Gly	Gly	Ser	Cys	Ser
				35				40					45		
Tyr	Gly	Ser	Ile	Ser	Phe	Pro	Pro	Lys	Ala	Tyr	Glu	Thr	Gly	Cys	Asn

50                      55                      60  
 Leu Asn Pro Tyr Phe Ile Lys Gly Glu Glu Met Ser Lys Ser Pro Glu  
 65                      70                      75                      80  
 Ile Val Gly Lys Ser Ile Ile Arg Thr Arg Asn Gly Val Phe Leu Leu  
                          85                      90                      95  
 Leu Ile Ser Arg Gly Glu Gly  
                          100

<210> 3792

<211> 564

<212> PRT

<213> Homo sapiens

<400> 3792

Met Pro Asn Arg Thr Arg Arg Pro Gly Thr Gln Met Val Arg Thr Phe  
 1                      5                      10                      15  
 Cys Pro Pro Pro Leu Pro Lys Pro Ser Ser Thr Thr Pro Thr Pro Leu  
                          20                      25                      30  
 Val Ser Glu Thr Gly Gly Asn Ser Pro Ser Asp Lys Val Asp Asn Glu  
                          35                      40                      45  
 Leu Lys Asn Leu Glu His Leu Ser Ser Phe Ser Ser Asp Glu Asp Asp  
                          50                      55                      60  
 Pro Gly Tyr Ser Gln Asp Ala Tyr Lys Ser Val Ser Thr Pro Leu Thr  
 65                      70                      75                      80  
 Thr Leu Asp Ala Thr Ser Asp Lys Lys Lys Lys Thr Glu Ala Leu Gln  
                          85                      90                      95  
 Val Ala Thr Thr Ser Pro Thr Ala Asn Thr Thr Gly Thr Ala Thr Thr  
                          100                      105                      110

Ser Ser Thr Thr Val Gly Ala Val Lys Gln Glu Pro Leu His Ser Thr  
115 120 125  
Ser Tyr Ala Val Asn Ile Leu Glu Asn Ile Ser Ser Ser Glu Ser Ser  
130 135 140  
Lys Pro Ile Glu Leu Asp Gly Leu Pro Ser Asp Gln Phe Ala Lys Gly  
145 150 155 160  
Gln Asp Thr Val Ala Ile Glu Gly Phe Thr Asp Glu Glu Asp Thr Glu  
165 170 175  
Ser Gly Gly Glu Gly Gln Tyr Arg Glu Arg Asp Glu Phe Val Val Lys  
180 185 190  
Ile Glu Asp Ile Glu Thr Phe Lys Glu Ala Leu Lys Thr Gly Lys Glu  
195 200 205  
Pro Pro Ala Ile Trp Lys Val Gln Lys Ala Leu Leu Gln Lys Phe Val  
210 215 220  
Pro Glu Ile Arg Asp Gly Gln Arg Glu Phe Ala Ala Thr Asn Ser Tyr  
225 230 235 240  
Leu Gly Tyr Phe Gly Asp Ala Lys Ser Lys Tyr Lys Arg Ile Tyr Val  
245 250 255  
Lys Phe Ile Glu Asn Ala Asn Lys Lys Glu Tyr Val Arg Val Cys Ser  
260 265 270  
Lys Lys Pro Arg Asn Lys Pro Ser Gln Thr Ile Arg Thr Val Gln Ala  
275 280 285  
Lys Pro Ser Ser Ser Ser Lys Thr Ser Asp Pro Leu Ala Ser Lys Thr  
290 295 300  
Thr Thr Thr Lys Ala Pro Ser Val Lys Pro Lys Val Lys Gln Pro Lys  
305 310 315 320  
Val Lys Ala Glu Pro Pro Pro Lys Lys Arg Lys Lys Trp Lys Glu Glu  
325 330 335  
Phe Ser Ser Ser Gln Ser Asp Ser Ser Pro Glu Ile His Thr Ser Ser

340	345	350	
Ser Asp Asp Glu Glu Phe Glu Pro Pro Ala Pro Phe Val Thr Arg Phe			
355	360	365	
Leu Asn Thr Arg Ala Met Lys Glu Thr Phe Lys Ser Tyr Met Glu Leu			
370	375	380	
Leu Val Ser Ile Ala Leu Asp Pro Asp Thr Met Gln Ala Leu Glu Lys			
385	390	395	400
Ser Asn Asp Glu Leu Leu Leu Pro His Met Lys Lys Ile Asp Gly Met			
405	410	415	
Leu Asn Asp Asn Arg Lys Arg Leu Leu Leu Asn Leu His Leu Asp Gln			
420	425	430	
Ser Phe Lys Asn Ala Leu Glu Ser Phe Pro Glu Leu Thr Ile Ile Thr			
435	440	445	
Arg Asp Ser Lys Ala Lys Ser Gly Gly Thr Ala Ile Ser Lys Ile Lys			
450	455	460	
Met Asn Gly Lys Ala Tyr Asn Lys Lys Thr Leu Arg Thr Ser Lys Thr			
465	470	475	480
Thr Thr Lys Ser Ala Gln Glu Phe Ala Val Asp Pro Glu Lys Ile Gln			
485	490	495	
Leu Tyr Ser Leu Tyr His Ser Leu His His Tyr Lys Tyr His Val Tyr			
500	505	510	
Leu Ile Cys Lys Asp Glu Ile Ser Ser Val Gln Lys Lys Asn Glu Asp			
515	520	525	
Leu Gly Gln Glu Glu Ile Val Gln Leu Cys Met Lys Asn Val Lys Trp			
530	535	540	
Val Glu Asp Leu Phe Glu Lys Phe Gly Glu Leu Leu Asn His Val Gln			
545	550	555	560
Gln Lys Cys Ser			

&lt;210&gt; 3793

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3793

Met Arg Glu Leu Arg His Arg Ala Arg Pro Ser Gly Phe Asn Arg Trp

1 5 10 15

Met Gly Ala Ala Ser Gln Ser Pro Leu Ser Ser Ala Ser Pro Ser Pro

20 25 30

Gly His Thr Pro Ala Pro Thr Thr Ser Pro Thr Gly Tyr Arg Ala Glu

35 40 45

Asp Pro Pro Ala Gly Arg Ala Ala Gln Arg Pro Gln His Thr His Pro

50 55 60

Thr Leu Gln Gly Leu Thr Leu Pro Ala Gln Leu Asn Ala Thr Ser Ser

65 70 75 80

Leu Lys Leu Ser Pro Ser Pro Pro Pro Thr Arg Ala Ala Ser Gly Pro

85 90 95

Arg Thr Val Pro Gly Gly Ala Pro Arg Gln Asp Gln Thr Tyr Pro Ser

100 105 110

Ser Lys Ser Pro Ser Leu Leu Thr Ala Gln Met Leu Pro Gly His

115 120 125

&lt;210&gt; 3794

&lt;211&gt; 711

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3794

Met	Ser	Ser	Val	Gln	Ser	Gln	Gln	Glu	Gln	Leu	Ser	Gln	Ser	Asp	Pro
1				5					10					15	
Ser	Pro	Ser	Pro	Asn	Ser	Cys	Ser	Ser	Phe	Glu	Leu	Ile	Asp	Met	Asp
			20					25					30		
Ala	Gly	Ser	Leu	Tyr	Glu	Pro	Val	Ser	Pro	His	Trp	Phe	Tyr	Cys	Lys
			35				40					45			
Ile	Ile	Asp	Ser	Lys	Glu	Thr	Trp	Ile	Pro	Phe	Asn	Ser	Glu	Asp	Ser
		50				55					60				
Gln	Gln	Leu	Glu	Glu	Ala	Tyr	Ser	Ser	Gly	Lys	Gly	Cys	Asn	Gly	Arg
65					70				75					80	
Val	Val	Pro	Thr	Asp	Gly	Gly	Arg	Tyr	Asp	Val	His	Leu	Gly	Glu	Arg
				85				90					95		
Met	Arg	Tyr	Ala	Val	Tyr	Trp	Asp	Glu	Leu	Ala	Ser	Glu	Val	Arg	Arg
			100					105					110		
Cys	Thr	Trp	Phe	Tyr	Lys	Gly	Asp	Lys	Asp	Asn	Lys	Tyr	Val	Pro	Tyr
			115				120					125			
Ser	Glu	Ser	Phe	Ser	Gln	Val	Leu	Glu	Glu	Thr	Tyr	Met	Leu	Ala	Val
			130			135						140			
Thr	Leu	Asp	Glu	Trp	Lys	Lys	Lys	Leu	Glu	Ser	Pro	Asn	Arg	Glu	Ile
145					150				155					160	
Ile	Ile	Leu	His	Asn	Pro	Lys	Leu	Met	Val	His	Tyr	Gln	Pro	Val	Ala
			165					170					175		
Gly	Ser	Asp	Asp	Trp	Gly	Ser	Thr	Pro	Thr	Glu	Gln	Gly	Arg	Pro	Arg
			180					185					190		
Thr	Val	Lys	Arg	Gly	Val	Glu	Asn	Ile	Ser	Val	Asp	Ile	His	Cys	Gly
			195					200					205		



Glu Pro Leu Gln Ile Asp His Leu Val Phe Val Val His Gly Ile Gly  
210 215 220  
Pro Ala Cys Asp Leu Arg Phe Arg Ser Ile Val Gln Cys Val Asn Asp  
225 230 235 240  
Phe Arg Ser Val Ser Leu Asn Leu Leu Gln Thr His Phe Lys Lys Ala  
245 250 255  
Gln Glu Asn Gln Gln Ile Gly Arg Val Glu Phe Leu Pro Val Asn Trp  
260 265 270  
His Ser Pro Leu His Ser Thr Gly Val Asp Val Asp Leu Gln Arg Ile  
275 280 285  
Thr Leu Pro Ser Ile Asn Arg Leu Arg His Phe Thr Asn Asp Thr Ile  
290 295 300  
Leu Asp Val Phe Phe Tyr Asn Ser Pro Thr Tyr Cys Gln Thr Ile Val  
305 310 315 320  
Asp Thr Val Ala Ser Glu Met Asn Arg Ile Tyr Thr Leu Phe Leu Gln  
325 330 335  
Arg Asn Pro Asp Phe Lys Gly Gly Val Ser Ile Ala Gly His Ser Leu  
340 345 350  
Gly Ser Leu Ile Leu Phe Asp Ile Leu Thr Asn Gln Lys Asp Ser Leu  
355 360 365  
Gly Asp Ile Asp Ser Glu Lys Asp Ser Leu Asn Ile Val Met Asp Gln  
370 375 380  
Gly Asp Thr Pro Thr Leu Glu Glu Asp Leu Lys Lys Leu Gln Leu Ser  
385 390 395 400  
Glu Phe Phe Asp Ile Phe Glu Lys Glu Lys Val Asp Lys Glu Ala Leu  
405 410 415  
Ala Leu Cys Thr Asp Arg Asp Leu Gln Glu Ile Gly Ile Pro Leu Gly  
420 425 430  
Pro Arg Lys Lys Ile Leu Asn Tyr Phe Ser Thr Arg Lys Asn Ser Met

435 440 445  
Gly Ile Lys Arg Pro Ala Pro Gln Pro Ala Ser Gly Ala Asn Ile Pro  
450 455 460  
Lys Glu Ser Glu Phe Cys Ser Ser Ser Asn Thr Arg Asn Gly Asp Tyr  
465 470 475 480  
Leu Asp Val Gly Ile Gly Gln Val Ser Val Lys Tyr Pro Arg Leu Ile  
485 490 495  
Tyr Lys Pro Glu Ile Phe Phe Ala Phe Gly Ser Pro Ile Gly Met Phe  
500 505 510  
Leu Thr Val Arg Gly Leu Lys Arg Ile Asp Pro Asn Tyr Arg Phe Pro  
515 520 525  
Thr Cys Lys Gly Phe Phe Asn Ile Tyr His Pro Phe Asp Pro Val Ala  
530 535 540  
Tyr Arg Ile Glu Pro Met Val Val Pro Gly Val Glu Phe Glu Pro Met  
545 550 555 560  
Leu Ile Pro His His Lys Gly Arg Lys Arg Met His Leu Glu Leu Arg  
565 570 575  
Glu Gly Leu Thr Arg Met Ser Met Asp Leu Lys Asn Asn Leu Leu Gly  
580 585 590  
Ser Leu Arg Met Ala Trp Lys Ser Phe Thr Arg Ala Pro Tyr Pro Ala  
595 600 605  
Leu Gln Ala Ser Glu Thr Pro Glu Glu Thr Glu Ala Glu Pro Glu Ser  
610 615 620  
Thr Ser Glu Lys Pro Ser Asp Val Asn Thr Glu Glu Thr Ser Val Ala  
625 630 635 640  
Val Lys Glu Glu Val Leu Pro Ile Asn Val Gly Met Leu Asn Gly Gly  
645 650 655  
Gln Arg Ile Asp Tyr Val Leu Gln Glu Lys Pro Ile Glu Ser Phe Asn  
660 665 670

Glu Tyr Leu Phe Ala Leu Gln Ser His Leu Cys Tyr Trp Glu Ser Glu  
           675                                680                                685  
 Asp Thr Val Leu Leu Val Leu Lys Glu Ile Tyr Gln Thr Gln Gly Ile  
           690                                695                                700  
 Phe Leu Asp Gln Pro Leu Gln  
 705                                710

<210> 3795

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3795

Met Ser Arg Val Met Pro Ala Trp Phe Leu Phe His Ala Trp Arg Ile  
   1                                5                                10                                15  
 Cys Ile Gly Glu Leu Arg Thr Ala Ala Lys Val Ser Gly Gln Gly Trp  
                                 20                                25                                30  
 Trp Ala Gln Trp Ala Ala Cys Gly Arg Cys Leu Ala Met Val Arg Arg  
                                 35                                40                                45  
 Cys Glu Ser Pro Pro Gly Ser Arg Ala Val Gly Gly Gln Leu Arg His  
                                 50                                55                                60  
 Gly Ser His Pro Gln Pro Ser Glu Trp Leu Pro Cys Ser Thr Gln Gly  
   65                                70                                75                                80  
 Gly Lys Arg Glu Arg Pro Met Pro Ala Val Ser Ser Val Leu Cys Leu  
                                 85                                90                                95  
 His Cys Cys Phe Pro Ser Phe Leu Cys Arg Ser Trp Ser Ser Gln Arg  
                                 100                                105                                110  
 Gln His Lys Ala Gly Glu Arg Gly Gly Gly Gly Gly Lys Met Glu Glu

115 120 125  
Pro Thr Leu Leu Pro Pro Arg Leu Arg Glu Arg Asn Ile Ser Leu Asp  
130 135 140  
Trp Lys Val Pro Ile Arg Gln Tyr  
145 150

&lt;210&gt; 3796

&lt;211&gt; 890

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3796

Met Asp Phe Gly Thr Val Arg Glu Thr Leu Asp Ala Gly Asn Tyr Asp  
1 5 10 15  
Ser Pro Leu Glu Phe Cys Lys Asp Ile Arg Leu Ile Phe Ser Asn Ala  
20 25 30  
Lys Ala Tyr Thr Pro Asn Lys Arg Ser Lys Ile Tyr Ser Met Thr Leu  
35 40 45  
Arg Leu Ser Ala Leu Phe Glu Glu Lys Met Lys Lys Ile Ser Ser Asp  
50 55 60  
Phe Lys Ile Gly Gln Lys Phe Asn Glu Lys Leu Arg Arg Ser Gln Arg  
65 70 75 80  
Phe Lys Gln Arg Gln Asn Cys Lys Gly Asp Ser Gln Pro Asn Lys Ser  
85 90 95  
Ile Arg Asn Leu Lys Pro Lys Arg Leu Lys Ser Gln Thr Lys Ile Ile  
100 105 110  
Pro Glu Leu Val Gly Ser Pro Thr Gln Ser Thr Ser Ser Arg Thr Ala  
115 120 125

Tyr Leu Gly Thr His Lys Thr Ser Ala Gly Ile Ser Ser Gly Val Thr  
 130 135 140  
 Ser Gly Asp Ser Ser Asp Ser Ala Glu Ser Ser Glu Arg Arg Lys Arg  
 145 150 155 160  
 Asn Arg Pro Ile Thr Asn Gly Ser Thr Leu Ser Glu Ser Glu Val Glu  
 165 170 175  
 Asp Ser Leu Ala Thr Ser Leu Ser Ser Ser Ala Ser Ser Ser Ser Glu  
 180 185 190  
 Glu Ser Lys Glu Ser Ser Arg Ala Arg Glu Ser Ser Ser Arg Ser Gly  
 195 200 205  
 Leu Ser Arg Ser Ser Asn Leu Arg Val Thr Arg Thr Arg Ala Ala Gln  
 210 215 220  
 Arg Lys Thr Gly Pro Val Ser Leu Ala Asn Gly Cys Gly Arg Lys Ala  
 225 230 235 240  
 Thr Arg Lys Arg Val Tyr Leu Ser Asp Ser Asp Asn Asn Ser Leu Glu  
 245 250 255  
 Thr Gly Glu Ile Leu Lys Ala Arg Ala Gly Asn Asn Arg Lys Val Leu  
 260 265 270  
 Arg Lys Cys Ala Ala Val Ala Ala Asn Lys Ile Lys Leu Met Ser Asp  
 275 280 285  
 Val Glu Glu Asn Ser Ser Ser Glu Ser Val Cys Ser Gly Arg Lys Leu  
 290 295 300  
 Pro His Arg Asn Ala Ser Ala Val Ala Arg Lys Lys Leu Leu His Asn  
 305 310 315 320  
 Ser Glu Asp Glu Gln Ser Leu Lys Ser Glu Ile Glu Glu Glu Glu Leu  
 325 330 335  
 Lys Asp Glu Asn Gln Leu Leu Pro Val Ser Ser Ser His Thr Ala Gln  
 340 345 350  
 Ser Asn Val Asp Glu Ser Glu Asn Arg Asp Ser Glu Ser Glu Ser Asp

355 360 365  
Leu Arg Val Ala Arg Lys Asn Trp His Ala Asn Gly Tyr Lys Ser His  
370 375 380  
Thr Pro Ala Pro Ser Lys Thr Lys Phe Leu Lys Ile Glu Ser Ser Glu  
385 390 395 400  
Glu Asp Ser Lys Ser His Asp Ser Asp His Ala Cys Asn Arg Thr Ala  
405 410 415  
Gly Pro Ser Thr Ser Val Gln Lys Leu Lys Ala Glu Ser Ile Ser Glu  
420 425 430  
Glu Ala Asp Ser Glu Pro Gly Arg Ser Gly Gly Arg Lys Tyr Asn Thr  
435 440 445  
Phe His Lys Asn Ala Ser Phe Phe Lys Lys Thr Lys Ile Leu Ser Asp  
450 455 460  
Ser Glu Asp Ser Glu Ser Glu Glu Gln Asp Arg Glu Asp Gly Lys Cys  
465 470 475 480  
His Lys Met Glu Met Asn Pro Ile Ser Gly Asn Leu Asn Cys Asp Pro  
485 490 495  
Ile Ala Met Ser Gln Cys Ser Ser Asp His Gly Cys Glu Thr Asp Leu  
500 505 510  
Asp Ser Asp Asp Asp Lys Ile Glu Lys Pro Asn Asn Phe Met Lys Asp  
515 520 525  
Ser Ala Ser Gln Asp Asn Gly Leu Ser Arg Lys Ile Ser Arg Lys Arg  
530 535 540  
Val Cys Ser Ser Asp Ser Asp Ser Ser Leu Gln Val Val Lys Lys Ser  
545 550 555 560  
Ser Lys Ala Arg Thr Gly Leu Leu Arg Ile Thr Arg Arg Cys Ala Ala  
565 570 575  
Thr Ala Ala Asn Lys Ile Lys Leu Met Ser Asp Val Glu Asp Val Ser  
580 585 590

Leu Glu Asn Val His Thr Arg Ser Lys Asn Gly Arg Lys Lys Pro Leu  
595 600 605

His Leu Ala Cys Thr Thr Ala Lys Lys Lys Leu Ser Asp Cys Glu Gly  
610 615 620

Ser Val His Cys Glu Val Pro Ser Glu Gln Tyr Ala Cys Glu Gly Lys  
625 630 635 640

Pro Pro Asp Pro Asp Ser Glu Gly Ser Thr Lys Val Leu Ser Gln Ala  
645 650 655

Leu Asn Gly Asp Ser Asp Ser Glu Asp Met Leu Asn Ser Glu His Lys  
660 665 670

His Arg His Thr Asn Ile His Lys Ile Asp Ala Pro Ser Lys Arg Lys  
675 680 685

Ser Ser Ser Val Thr Ser Ser Gly Glu Asp Ser Lys Ser His Ile Pro  
690 695 700

Gly Ser Glu Thr Asp Arg Thr Phe Ser Ser Glu Ser Thr Leu Ala Gln  
705 710 715 720

Lys Ala Thr Ala Glu Asn Asn Phe Glu Val Glu Leu Asn Tyr Gly Leu  
725 730 735

Arg Arg Trp Asn Gly Arg Arg Leu Arg Thr Tyr Gly Lys Ala Pro Phe  
740 745 750

Ser Lys Thr Lys Val Ile His Asp Ser Gln Glu Thr Ala Glu Lys Glu  
755 760 765

Val Lys Arg Lys Arg Ser His Pro Glu Leu Glu Asn Val Lys Ile Ser  
770 775 780

Glu Thr Thr Gly Asn Ser Lys Phe Arg Pro Asp Thr Ser Ser Lys Ser  
785 790 795 800

Ser Asp Leu Gly Ser Val Thr Glu Ser Asp Ile Asp Cys Thr Asp Asn  
805 810 815

Thr Lys Thr Lys Arg Arg Lys Thr Lys Gly Lys Ala Lys Val Val Arg

820	825	830	
Lys Glu Phe Val Pro Arg Asp Arg Glu Pro Asn Thr Lys Val Arg Thr			
835	840	845	
Cys Met His Asn Gln Lys Asp Ala Val Gln Met Pro Ser Glu Thr Leu			
850	855	860	
Lys Ala Lys Met Val Pro Glu Lys Val Pro Arg Arg Cys Ala Thr Val			
865	870	875	880
Ala Ala Asn Lys Ile Lys Ile Met Ser Asn			
885	890		

&lt;210&gt; 3797

&lt;211&gt; 874

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3797

Met Pro Gln Met Lys Ser Asp Lys Arg Glu Trp Ala Phe Val Lys Thr			
1	5	10	15
Ala Arg His Asn Trp Tyr Ser Arg Arg Phe Phe Phe Leu Ser Asn Asp			
20	25	30	
Glu Leu Leu Glu Ile Leu Ser Glu Thr Lys Asp Pro Leu Arg Val Gln			
35	40	45	
Pro His Leu Lys Lys Cys Phe Glu Gly Ile Ala Lys Leu Glu Phe Thr			
50	55	60	
Asp Asn Leu Gly Ile Val Gly Met Ile Ser Ser Glu Lys Glu Thr Val			
65	70	75	80
Pro Phe Ile Gln Lys Ile Tyr Pro Ala Asn Ala Lys Gly Met Val Glu			
85	90	95	



Lys Trp Leu Gln Gln Val Glu Gln Met Met Leu Ala Ser Met Arg Glu  
100 105 110  
Val Ile Gly Leu Gly Ile Glu Ala Tyr Val Lys Val Pro Arg Asn His  
115 120 125  
Trp Val Leu Gln Trp Pro Gly Gln Val Val Ile Cys Val Ser Ser Ile  
130 135 140  
Phe Trp Thr Gln Glu Val Ser Gln Ala Leu Ala Glu Asn Thr Leu Leu  
145 150 155 160  
Asp Phe Leu Lys Lys Ser Asn Asp Gln Ile Ala Gln Ile Val Gln Leu  
165 170 175  
Val Arg Gly Lys Leu Ser Ser Gly Ala Arg Leu Thr Leu Gly Ala Leu  
180 185 190  
Thr Val Ile Asp Val His Ala Arg Asp Val Val Ala Lys Leu Ser Glu  
195 200 205  
Asp Arg Val Ser Asp Leu Asn Asp Phe Gln Trp Ile Ser Gln Leu Arg  
210 215 220  
Tyr Tyr Trp Val Ala Lys Asp Val Gln Val Gln Ile Ile Thr Thr Glu  
225 230 235 240  
Ala Leu Tyr Gly Tyr Glu Tyr Leu Gly Asn Ser Pro Arg Leu Val Ile  
245 250 255  
Thr Pro Leu Thr Asp Arg Cys Tyr Arg Thr Leu Met Gly Ala Leu Lys  
260 265 270  
Leu Asn Leu Gly Gly Ala Pro Glu Gly Pro Ala Gly Thr Gly Lys Thr  
275 280 285  
Glu Thr Thr Lys Asp Leu Ala Lys Ala Leu Ala Lys Gln Cys Val Val  
290 295 300  
Phe Asn Cys Ser Asp Gly Leu Asp Tyr Lys Ala Met Gly Lys Phe Phe  
305 310 315 320  
Lys Gly Leu Ala Gln Ala Gly Ala Trp Ala Cys Phe Asp Glu Phe Asn

325	330	335
Arg Ile Glu Val Glu Val Leu Ser Val Val Ala Gln Gln Ile Leu Ser		
340	345	350
Ile Gln Gln Ala Ile Ile Arg Lys Leu Lys Thr Phe Ile Phe Glu Gly		
355	360	365
Thr Glu Leu Ser Leu Asn Pro Thr Cys Ala Val Phe Ile Thr Met Asn		
370	375	380
Pro Gly Tyr Ala Gly Arg Ala Glu Leu Pro Asp Asn Leu Lys Ala Leu		
385	390	395
Phe Arg Thr Val Ala Met Met Val Pro Asp Tyr Ala Leu Ile Gly Glu		
405	410	415
Met Ser Leu Tyr Ser Thr Gly Phe Leu Asp Ser Arg Ser Leu Ala Gln		
420	425	430
Lys Ile Val Ala Thr Tyr Arg Leu Cys Ser Glu Gln Leu Ser Ser Gln		
435	440	445
His His Tyr Asp Tyr Gly Met Arg Ala Val Asn Ser Val Leu Thr Ala		
450	455	460
Ala Gly Asn Leu Lys Leu Lys Tyr Pro Glu Glu Asn Glu Ser Val Leu		
465	470	475
Leu Leu Arg Ala Leu Leu Asp Val Asn Leu Ala Lys Phe Leu Ala Gln		
485	490	495
Asp Val Pro Leu Phe Gln Gly Ile Ile Ser Asp Leu Phe Pro Gly Val		
500	505	510
Val Leu Pro Lys Pro Asp Tyr Glu Val Phe Leu Lys Val Leu Asn Asp		
515	520	525
Asn Ile Lys Lys Met Lys Leu Gln Pro Val Pro Trp Phe Ile Gly Lys		
530	535	540
Ile Ile Gln Ile Tyr Glu Met Met Leu Val Arg His Gly Tyr Met Ile		
545	550	555
		560

Val Gly Asp Pro Met Gly Gly Lys Thr Ser Ala Tyr Lys Val Leu Ala  
565 570 575

Ala Ala Leu Gly Asp Leu His Ala Ala Asn Gln Met Glu Glu Phe Ala  
580 585 590

Val Glu Tyr Lys Ile Ile Asn Pro Lys Ala Ile Thr Met Gly Gln Leu  
595 600 605

Tyr Gly Cys Phe Asp Gln Val Ser His Glu Trp Met Asp Gly Val Leu  
610 615 620

Ala Asn Ala Phe Arg Glu Gln Ala Ser Ser Leu Ser Asp Asp Arg Lys  
625 630 635 640

Trp Ile Ile Phe Asp Gly Pro Val Asp Ala Ile Trp Ile Glu Asn Met  
645 650 655

Asn Thr Val Leu Asp Asp Asn Lys Lys Leu Cys Leu Met Ser Gly Glu  
660 665 670

Ile Ile Gln Met Asn Ser Lys Met Ser Leu Ile Phe Glu Pro Ala Asp  
675 680 685

Leu Glu Gln Ala Ser Pro Ala Thr Val Ser Arg Cys Gly Met Ile Tyr  
690 695 700

Met Glu Pro His Gln Leu Gly Trp Lys Pro Leu Lys Asp Ser Tyr Met  
705 710 715 720

Asp Thr Leu Pro Ser Ser Leu Thr Lys Glu His Lys Glu Leu Val Asn  
725 730 735

Asp Met Phe Met Trp Leu Val Gln Pro Cys Leu Glu Phe Gly Arg Leu  
740 745 750

His Cys Lys Phe Val Val Gln Thr Ser Pro Ile His Leu Ala Phe Ser  
755 760 765

Met Met Arg Leu Tyr Ser Ser Leu Leu Asp Glu Ile Arg Ala Val Glu  
770 775 780

Glu Glu Glu Met Glu Leu Gly Glu Gly Leu Ser Ser Gln Gln Ile Phe

785                      790                      795                      800  
 Leu Trp Leu Gln Gly Leu Phe Leu Phe Ser Leu Val Trp Thr Val Ala  
                             805                      810                      815  
 Gly Thr Ile Asn Ala Asp Ser Arg Lys Lys Phe Asp Val Phe Phe Arg  
                             820                      825                      830  
 Asn Leu Ile Met Gly Met Asp Asp Asn His Pro Arg Pro Lys Ser Val  
                             835                      840                      845  
 Lys Leu Thr Lys Asn Asn Ile Phe Pro Glu Arg Gly Ser Ile Tyr Asp  
                             850                      855                      860  
 Phe Tyr Phe Ile Lys Gln Ala Ser Gly His  
 865                      870

<210> 3798

<211> 184

<212> PRT

<213> Homo sapiens

<400> 3798

Met Glu Ser Ile Tyr Leu Gln Lys His Leu Gly Ala Cys Leu Thr Gln  
     1                      5                      10                      15  
 Gly Leu Ala Glu Val Ala Arg Val Arg Pro Val Asp Pro Ile Glu Tyr  
                             20                      25                      30  
 Leu Ala Leu Trp Ile Tyr Lys Tyr Lys Glu Asn Val Thr Met Glu Gln  
                             35                      40                      45  
 Leu Arg Gln Lys Glu Met Ala Lys Leu Glu Arg Glu Arg Glu Leu Ala  
                             50                      55                      60  
 Leu Met Glu Gln Glu Met Met Glu Arg Leu Lys Ala Glu Glu Leu Leu  
                             65                      70                      75                      80

Leu Gln Gln Gln Gln Leu Ala Leu Gln Leu Glu Leu Glu Met Gln Glu  
                             85                            90                            95  
 Lys Glu Arg Gln Arg Ile Gln Glu Leu Gln Arg Ala Gln Glu Gln Leu  
                             100                            105                            110  
 Gly Lys Glu Met Arg Met Asn Met Glu Asn Leu Val Arg Asn Glu Asp  
                             115                            120                            125  
 Ile Leu His Ser Glu Glu Ala Thr Leu Asp Ser Gly Lys Thr Leu Ala  
                             130                            135                            140  
 Glu Ile Ser Asp Arg Tyr Gly Ala Pro Asn Leu Ser Arg Val Glu Glu  
 145                            150                            155                            160  
 Leu Asp Glu Pro Met Phe Ser Asp Val Ser Ile Ser Val Phe Cys Glu  
                             165                            170                            175  
 Lys Thr Arg Phe Cys Phe Cys Phe  
                             180

&lt;210&gt; 3799

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3799

Met Val Met Gly Tyr Ser Ala Gly Ala Leu His Trp Ser Gly Met Val  
           1                            5                            10                            15  
 Cys Gln Cys Arg Ser Tyr Gly Val Gly Pro Gln Ser Pro Gln Asp Cys  
                             20                            25                            30  
 Ser Ala Ser Arg Cys Gly Leu Ala Gly Ala Pro Gly Glu Ala Ser Arg  
                             35                            40                            45  
 Ala Arg Gly Pro Gln Val Gly Leu Ala Leu Phe Asp Gly Gln Asp His

50	55	60			
Pro	Ala	Glu	Phe	Arg	Ser
	Asp	Asp	Ser	Pro	Arg
	Ala	Lys	Val	Ser	Cys
65	70	75	80		
Gly	Ser	Lys	Leu	Ser	Leu
	Val	Gly	Met	Ala	Val
	Pro	Gly	His	Ser	Pro
	85	90	95		
Leu	Gln	Thr	Leu	Leu	Arg
	Pro	Thr	Leu	Trp	Ala
	Pro	His	Gln	Leu	Ala
	100	105	110		
Cys	His	Pro	Tyr	His	Phe
	Ser	Lys	Gln	Leu	Ser
	Leu	Thr	Thr	Arg	
	115	120	125		

&lt;210&gt; 3800

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3800

Met	Ser	Val	Pro	Thr	Ser	Thr	Leu	Asp	Ser	Gln	Ser	Pro	Pro	Thr	Ala
1				5					10					15	
His	Thr	Ala	Lys	Cys	Thr	Ala	Leu	Cys	Ser	Leu	Met	Pro	His	Gly	Ser
		20					25					30			
Arg	Glu	His	Ser	Val	Glu	Ile	Pro	Lys	Asp	Gln	Leu	Ala	Ser	Pro	Thr
		35				40					45				
Glu	Pro	Arg	Pro	Trp	Glu	Gln	Gln	Cys	Tyr	His	Gly	Asn	Gly	Gln	Ser
	50					55					60				
Tyr	Arg	Gly	Thr	Tyr	Phe	Thr	Thr	Val	Thr	Gly	Arg	Thr	Cys	Gln	Ala
	65				70					75				80	
Trp	Ser	Ser	Met	Thr	Pro	His	Gln	His	Ser	Arg	Thr	Pro	Glu	Lys	Tyr
			85					90						95	

Pro Asn Ala Tyr Val Phe Val Leu Tyr His Lys Arg Arg Lys Gly Gln  
                   100                  105                  110  
 Leu Lys Phe Leu Leu Glu Glu Ser Cys Phe Glu Leu Thr Ala Gln Asp  
                   115                  120                  125  
 Ser Thr Cys Val Arg Cys Lys Gly His Ser Lys Met Ser Gln Glu His  
                   130                  135                  140  
 Cys Leu Gly Ala Lys Ser Leu Arg Glu Glu Lys Tyr  
                   145                  150                  155

<210> 3801

<211> 461

<212> PRT

<213> Homo sapiens

<400> 3801

Met Gly Val Ser Gly Pro Leu Val Leu Val Leu Ser Thr Glu Phe Arg  
                   1                  5                  10                  15  
 His Leu Tyr Leu Pro Lys Tyr Glu Gln Thr Thr Tyr Thr Cys Ala His  
                   20                  25                  30  
 Val Ala Arg Glu Thr Ser Ala Leu Lys Leu Arg Pro Arg Val His Leu  
                   35                  40                  45  
 Ala Cys Val Leu Ser Val His Thr Pro Thr Lys His Pro Gly Ala Thr  
                   50                  55                  60  
 Pro Gly Ala Ser Ala Ile Gly Gly Cys Pro Phe Pro Glu Ala Gln Ala  
                   65                  70                  75                  80  
 Pro Pro Ser Pro Ser Arg Ile Leu Arg Phe Pro Trp Gln Leu Val Gln  
                   85                  90                  95  
 Glu Gln Val Arg Gln Thr Met Ala Glu Ala Leu Lys Val Trp Ser Asp

100	105	110	
Val Thr Pro Leu Thr Phe Thr Glu Val His Glu Gly Arg Ala Asp Ile			
115	120	125	
Met Ile Asp Phe Ala Arg Tyr Trp His Gly Asp Asp Leu Pro Phe Asp			
130	135	140	
Gly Pro Gly Gly Ile Leu Ala His Ala Phe Phe Pro Lys Thr His Arg			
145	150	155	160
Glu Gly Asp Val His Phe Asp Tyr Asp Glu Thr Trp Thr Ile Gly Asp			
165	170	175	
Asp Gln Gly Thr Asp Leu Leu Gln Val Ala Ala His Glu Phe Gly His			
180	185	190	
Val Leu Gly Leu Gln His Thr Thr Ala Ala Lys Ala Leu Met Ser Ala			
195	200	205	
Phe Tyr Thr Phe Arg Tyr Pro Leu Ser Leu Ser Pro Asp Asp Cys Arg			
210	215	220	
Gly Val Gln His Leu Tyr Gly Gln Pro Trp Pro Thr Val Thr Ser Arg			
225	230	235	240
Thr Pro Ala Leu Gly Pro Gln Ala Gly Ile Asp Thr Asn Glu Ile Ala			
245	250	255	
Pro Leu Glu Pro Asp Ala Pro Pro Asp Ala Cys Glu Ala Ser Phe Asp			
260	265	270	
Ala Val Ser Thr Ile Arg Gly Glu Leu Phe Phe Phe Lys Ala Gly Phe			
275	280	285	
Val Trp Arg Leu Arg Gly Gly Gln Leu Gln Pro Gly Tyr Pro Ala Leu			
290	295	300	
Ala Ser Arg His Trp Gln Gly Leu Pro Ser Pro Val Asp Ala Ala Phe			
305	310	315	320
Glu Asp Ala Gln Gly His Ile Trp Phe Phe Gln Gly Ala Gln Tyr Trp			
325	330	335	



Val Tyr Asp Gly Glu Lys Pro Val Leu Gly Pro Ala Pro Leu Thr Glu  
 340 345 350  
 Leu Gly Leu Val Arg Phe Pro Val His Ala Ala Leu Val Trp Gly Pro  
 355 360 365  
 Glu Lys Asn Lys Ile Tyr Phe Phe Arg Gly Arg Asp Tyr Trp Arg Phe  
 370 375 380  
 His Pro Ser Thr Arg Arg Val Asp Ser Pro Val Pro Arg Arg Ala Thr  
 385 390 395 400  
 Asp Trp Arg Gly Val Pro Ser Glu Ile Asp Ala Ala Phe Gln Asp Ala  
 405 410 415  
 Asp Gly Tyr Ala Tyr Phe Leu Arg Gly Arg Leu Tyr Trp Lys Phe Asp  
 420 425 430  
 Pro Val Lys Val Lys Ala Leu Glu Gly Phe Pro Arg Leu Val Gly Pro  
 435 440 445  
 Asp Phe Phe Gly Cys Ala Glu Pro Ala Asn Thr Phe Leu  
 450 455 460

&lt;210&gt; 3802

&lt;211&gt; 628

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3802

Met Ala Ala Arg Gln Gln Gln Gln Ile Glu Asn Gln Gln Gln Met Leu  
 1 5 10 15  
 Val Ala Lys Glu Gln Arg Leu His Phe Leu Lys Gln Gln Glu Arg Arg  
 20 25 30  
 Gln Gln Gln Ser Ile Ser Glu Asn Glu Lys Leu Gln Lys Leu Lys Glu

35	40	45
Arg Val Glu Ala Gln Glu Asn Lys Leu Lys Lys Ile Arg Ala Met Arg		
50	55	60
Gly Gln Val Asp Tyr Ser Lys Ile Met Asn Gly Asn Leu Ser Ala Glu		
65	70	75
Ile Glu Arg Phe Ser Ala Met Phe Gln Glu Lys Lys Gln Glu Val Gln		
85	90	95
Thr Ala Ile Leu Arg Val Asp Gln Leu Ser Gln Gln Leu Glu Asp Leu		
100	105	110
Lys Lys Gly Lys Leu Asn Gly Phe Gln Ser Tyr Asn Gly Lys Leu Thr		
115	120	125
Gly Pro Ala Ala Val Glu Leu Lys Arg Leu Tyr Gln Glu Leu Gln Ile		
130	135	140
Arg Asn Gln Leu Asn Gln Glu Gln Asn Ser Lys Leu Gln Gln Gln Lys		
145	150	155
Glu Leu Leu Asn Lys Arg Asn Met Glu Val Ala Met Met Asp Lys Arg		
165	170	175
Ile Ser Glu Leu Arg Glu Arg Leu Tyr Gly Lys Lys Ile Gln Leu Asn		
180	185	190
Arg Val Asn Gly Thr Ser Ser Pro Gln Ser Pro Leu Ser Thr Ser Gly		
195	200	205
Arg Val Ala Ala Val Gly Pro Tyr Ile Gln Val Pro Ser Ala Gly Ser		
210	215	220
Phe Pro Val Leu Gly Asp Pro Ile Lys Pro Gln Ser Leu Ser Ile Ala		
225	230	235
Ser Asn Ala Ala His Gly Arg Ser Lys Ser Ala Asn Asp Gly Asn Trp		
245	250	255
Pro Thr Leu Lys Gln Asn Ser Ser Ser Ser Val Lys Pro Val Gln Val		
260	265	270

Ala Gly Ala Asp Trp Lys Asp Pro Ser Val Glu Gly Ser Val Lys Gln  
 275 280 285  
 Gly Thr Val Ser Ser Gln Pro Val Pro Phe Ser Ala Leu Gly Pro Thr  
 290 295 300  
 Glu Lys Pro Gly Ile Glu Ile Gly Lys Val Pro Pro Pro Ile Pro Gly  
 305 310 315 320  
 Val Gly Lys Gln Leu Pro Pro Ser Tyr Gly Thr Tyr Pro Ser Pro Thr  
 325 330 335  
 Pro Leu Gly Pro Gly Ser Thr Ser Ser Leu Glu Arg Arg Lys Glu Gly  
 340 345 350  
 Ser Leu Pro Arg Pro Ser Ala Gly Leu Pro Ser Arg Gln Arg Pro Thr  
 355 360 365  
 Leu Leu Pro Ala Thr Gly Ser Thr Pro Gln Pro Gly Ser Ser Gln Gln  
 370 375 380  
 Ile Gln Gln Arg Ile Ser Val Pro Pro Ser Pro Thr Tyr Pro Pro Ala  
 385 390 395 400  
 Gly Pro Pro Ala Phe Pro Ala Gly Asp Ser Lys Pro Glu Leu Pro Leu  
 405 410 415  
 Thr Val Ala Ile Arg Pro Phe Leu Ala Asp Lys Gly Ser Arg Pro Gln  
 420 425 430  
 Ser Pro Arg Lys Gly Pro Gln Thr Val Asn Ser Ser Ser Ile Tyr Ser  
 435 440 445  
 Met Tyr Leu Gln Gln Ala Thr Pro Pro Lys Asn Tyr Gln Pro Ala Ala  
 450 455 460  
 His Ser Ala Leu Asn Lys Ser Val Lys Ala Val Tyr Gly Lys Pro Val  
 465 470 475 480  
 Leu Pro Ser Gly Ser Thr Ser Pro Ser Pro Leu Pro Phe Leu His Gly  
 485 490 495  
 Ser Leu Ser Thr Gly Thr Pro Gln Pro Gln Pro Pro Ser Glu Ser Thr

500                      505                      510  
 Glu Lys Glu Pro Glu Gln Asp Gly Pro Ala Ala Pro Ala Gly Pro Thr  
 515                      520                      525  
 Ser Arg Ser Cys Cys Thr Ser Ala Ser Thr Leu Ser Pro Thr Lys Leu  
 530                      535                      540  
 Thr Pro Ile Val His Ser Pro Leu Arg Tyr Gln Ser Asp Ala Asp Leu  
 545                      550                      555                      560  
 Glu Ala Leu Arg Arg Lys Leu Ala Asn Ala Pro Arg Pro Leu Lys Lys  
 565                      570                      575  
 Arg Ser Ser Ile Thr Glu Pro Glu Gly Pro Phe Leu Pro Ala Gln Pro  
 580                      585                      590  
 Leu Pro Gly Leu His Gly His Leu Gly Arg Cys Gly Gln Trp Lys His  
 595                      600                      605  
 Gln Cys Gln Trp Lys Pro Gly Arg Ala Pro Pro Cys Pro Ala His Ser  
 610                      615                      620  
 Pro Thr Pro Arg  
 625

<210> 3803

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3803

Met Pro Met Lys Pro Pro Arg Cys Thr Arg Thr Ser Arg Ser Ser Cys  
 1                      5                      10                      15  
 Ser Arg Thr Thr Leu Arg Pro Ala Ala Ser Pro Asn Thr Thr Ser Ser  
 20                      25                      30

Arg Gly Leu Thr Val His Pro Pro Cys Ser Ser Lys Leu Arg Met Asp  
 35 40 45  
 Pro Thr Pro Ala Trp Pro Ala Ser Cys Glu Ala Leu Met Gly Pro Ser  
 50 55 60  
 Ser Ser Ala Gly Pro Ala Arg Leu Arg Leu Pro Pro Arg Arg His Ser  
 65 70 75 80  
 Ser Leu Pro Pro Arg Arg Ala Ser Phe Leu Ile Val Ser Arg Ala Ser  
 85 90 95  
 Lys Ser Trp Glu Cys Ala Gly Pro Val Pro Ala Leu Pro Gly Gly Val  
 100 105 110  
 Val Ala Val Pro Thr Ser Gln Gln Asp Pro Gln Cys Arg Gly Ser Gln  
 115 120 125  
 Val Ala His Arg Arg Cys Leu Ser Arg Ala Ile Leu Gln Ser Gly Pro  
 130 135 140  
 Gln Cys Gln Ser Cys Leu Ser Ile Trp Val Thr Ser Ala Arg Ser Arg  
 145 150 155 160  
 Val Gln Ala Ser Ser Arg Ser  
 165

&lt;210&gt; 3804

&lt;211&gt; 344

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3804

Met Glu Pro Leu Glu Ile Pro Val Glu Thr Ile Thr Ser Glu Val Ile  
 1 5 10 15  
 Glu Lys Cys Thr Thr Pro Leu Ser Asp Asp His Asp Glu Lys Tyr Gly

20	25	30
Val Pro Ser Leu Glu Glu Leu Gly Phe Asp Thr Asp Gly Leu Ser Ser		
35	40	45
Ala Val Trp Pro Gly Gly Glu Thr Glu Ala Leu Thr Arg Leu Glu Arg		
50	55	60
His Leu Glu Arg Lys Ala Trp Val Ala Asn Phe Glu Arg Pro Arg Met		
65	70	75
Asn Ala Asn Ser Leu Leu Ala Ser Pro Thr Gly Leu Ser Pro Tyr Leu		
85	90	95
Arg Phe Gly Cys Leu Ser Cys Arg Leu Phe Tyr Phe Lys Leu Thr Asp		
100	105	110
Leu Tyr Lys Lys Val Lys Lys Asn Ser Ser Pro Pro Leu Ser Leu Tyr		
115	120	125
Gly Gln Leu Leu Trp Arg Glu Phe Phe Tyr Thr Ala Ala Thr Asn Asn		
130	135	140
Pro Arg Phe Asp Lys Met Glu Gly Asn Pro Ile Cys Val Gln Ile Pro		
145	150	155
Trp Asp Lys Asn Pro Glu Ala Leu Ala Lys Trp Ala Glu Gly Arg Thr		
165	170	175
Gly Phe Pro Trp Ile Asp Ala Ile Met Thr Gln Leu Arg Gln Glu Gly		
180	185	190
Trp Ile His His Leu Ala Arg His Ala Val Ala Cys Phe Leu Thr Arg		
195	200	205
Gly Asp Leu Trp Ile Ser Trp Glu Glu Gly Met Lys Val Phe Glu Glu		
210	215	220
Leu Leu Leu Asp Ala Asp Trp Ser Ile Asn Ala Gly Ser Trp Met Trp		
225	230	235
Leu Ser Cys Ser Ser Phe Phe Gln Gln Phe Phe His Cys Tyr Cys Pro		
245	250	255

Val Gly Phe Gly Arg Arg Thr Asp Pro Asn Gly Asp Tyr Ile Arg Arg  
 260 265 270

Tyr Leu Pro Val Leu Arg Gly Phe Pro Ala Lys Tyr Ile Tyr Asp Pro  
 275 280 285

Trp Asn Ala Pro Glu Gly Ile Gln Lys Val Ala Lys Cys Leu Ile Gly  
 290 295 300

Val Asn Tyr Pro Lys Pro Met Val Asn His Ala Glu Ala Ser Arg Leu  
 305 310 315 320

Asn Ile Glu Arg Met Lys Gln Ile Tyr Gln Gln Leu Ser Arg Tyr Arg  
 325 330 335

Gly Leu Glu Asn Phe Phe Val Leu  
 340

<210> 3805

<211> 485

<212> PRT

<213> Homo sapiens

<400> 3805

Met Asp Asn Glu Cys Val Ala Gln Thr Trp Phe Arg Phe Leu His Met  
 1 5 10 15

Leu Ser Asn Pro Val Asp Leu Ser Asn Pro Ala Ile Ile Ser Ser Thr  
 20 25 30

Pro Lys Phe Gln Glu Gln Phe Leu Asn Val Ser Gly Met Pro Gln Glu  
 35 40 45

Leu Asn Gln Tyr Pro Cys Leu Lys His Leu Pro Gln Ile Phe Phe Arg  
 50 55 60

Ala Met Arg Gly Ile Ser Cys Leu Val Asp Ala Phe Leu Gly Ile Ser

65	70	75	80
Arg Pro Arg Ser Asp Ser Ala Pro Pro Thr Pro Val Asn Arg Leu Ser			
	85	90	95
Met Pro Gln Ser Ala Ala Val Ser Thr Thr Pro Pro His Asn Arg Arg			
	100	105	110
His Arg Ala Val Thr Val Asn Lys Ala Thr Met Lys Thr Ser Thr Val			
	115	120	125
Ser Thr Ala His Ala Ser Lys Val Gln His Gln Thr Ser Ser Thr Ser			
	130	135	140
Pro Leu Ser Ser Pro Asn Gln Thr Ser Ser Glu Pro Arg Pro Leu Pro			
145	150	155	160
Ala Pro Arg Arg Pro Lys Val Asn Ser Ile Leu Asn Leu Phe Gly Ser			
	165	170	175
Trp Leu Phe Asp Ala Ala Phe Val His Cys Lys Leu His Asn Gly Ile			
	180	185	190
Asn Arg Asp Ser Ser Met Thr Ala Ile Thr Thr Gln Ala Ser Met Glu			
	195	200	205
Phe Arg Arg Lys Gly Ser Gln Met Ser Thr Asp Thr Met Val Ser Asn			
	210	215	220
Pro Met Phe Asp Ala Ser Glu Phe Pro Asp Asn Tyr Glu Ala Gly Arg			
225	230	235	240
Ala Glu Ala Cys Gly Thr Leu Cys Arg Ile Phe Cys Ser Lys Lys Thr			
	245	250	255
Gly Glu Glu Ile Leu Pro Ala Tyr Leu Ser Arg Phe Tyr Met Leu Leu			
	260	265	270
Ile Gln Gly Leu Gln Ile Asn Asp Tyr Val Cys His Pro Val Leu Ala			
	275	280	285
Ser Val Ile Leu Asn Ser Pro Pro Leu Phe Cys Cys Asp Leu Lys Gly			
	290	295	300



Ile Asp Val Val Val Pro Tyr Phe Ile Ser Ala Leu Glu Thr Ile Leu  
305 310 315 320  
Pro Asp Arg Glu Leu Ser Lys Phe Lys Ser Tyr Val Asn Pro Thr Glu  
325 330 335  
Leu Arg Arg Ser Ser Ile Asn Ile Leu Leu Ser Leu Leu Pro Leu Pro  
340 345 350  
His His Phe Gly Thr Val Lys Ser Glu Val Val Leu Glu Gly Lys Phe  
355 360 365  
Ser Asn Asp Asp Ser Ser Ser His Asp Lys Pro Ile Thr Phe Leu Ser  
370 375 380  
Leu Lys Leu Arg Leu Val Asn Ile Leu Ile Gly Ala Leu Gln Thr Glu  
385 390 395 400  
Thr Asp Pro Asn Asn Thr Gln Met Ile Leu Gly Ala Met Leu Asn Ile  
405 410 415  
Val Gln Asp Ser Ala Leu Leu Glu Ala Ile Gly Cys Gln Met Glu Met  
420 425 430  
Gly Gly Gly Glu Asn Asn Leu Lys Ser His Ser Arg Thr Asn Ser Gly  
435 440 445  
Ile Ser Ser Ala Ser Gly Gly Ser Thr Glu Pro Thr Thr Pro Asp Ser  
450 455 460  
Glu Arg Pro Ala Gln Ala Leu Leu Arg Val Met Leu Leu Ile Gln Ile  
465 470 475 480  
Gln Leu Leu Gly Ser  
485

&lt;210&gt; 3806

&lt;211&gt; 142

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3806

Met Phe Ala Cys Ala Lys Leu Ala Cys Thr Pro Ser Leu Ile Arg Ala  
1 5 10 15  
Gly Ser Arg Val Ala Tyr Arg Pro Ile Ser Ala Ser Val Leu Ser Gln  
20 25 30  
Pro Glu Ala Ser Arg Thr Gly Glu Gly Ser Ala Val Phe Asn Gly Ala  
35 40 45  
Gln Asn Gly Val Ser Gln Leu Ile Gln Arg Gly Phe Gln Thr Ser Ala  
50 55 60  
Ile Ser Arg Asp Ile Asp Thr Ala Ala Lys Phe Ile Gly Ala Gly Ala  
65 70 75 80  
Ala Thr Val Gly Val Ala Gly Ser Gly Ala Gly Ile Gly Thr Val Phe  
85 90 95  
Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn Pro Ser Leu Lys Gln Gln  
100 105 110  
Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala Leu Ser Glu Ala Met Gly  
115 120 125  
Leu Phe Cys Leu Met Val Ala Phe Leu Ile Leu Phe Ala Met  
130 135 140

<210> 3807

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3807

Met His Ser Lys Leu Ser His Cys Phe Phe Val Pro Leu Thr Cys Ile  
 1 5 10 15  
 Ser Trp Ile Met Leu Phe Leu Asp Phe Leu Phe Arg Ala Val Arg Ile  
 20 25 30  
 His Phe Leu Leu Cys His Cys Lys Ile Leu Ala Gly Ser Pro Ile Thr  
 35 40 45  
 Val Cys Thr Ala Leu Ser Cys Arg Gln Gly Gln Gly Glu Thr Ser Ala  
 50 55 60  
 Met Ala Ser Tyr Val Ala Arg Asn Leu Leu Met Ser Pro Ser Lys Thr  
 65 70 75 80  
 Val Gly Pro Ala Ser Ala Arg Pro Cys Ala Leu Lys Ser Ser Pro Tyr  
 85 90 95  
 Gly Glu Met Gly Leu Gly  
 100

&lt;210&gt; 3808

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3808

Met Pro Pro Arg Ser Leu Ser Cys His His Gly Thr Gly Trp Ala Trp  
 1 5 10 15  
 Arg Phe Gly Arg His Trp Lys Leu Arg Gly Glu Glu Ala Gly His Leu  
 20 25 30  
 Arg Gly Leu Gly His Leu Gly Gly Gln Gly Glu Arg Phe Gly Gly His  
 35 40 45  
 Gly Ala Gly Arg Phe Gly Ala Leu Gly Glu Asp Phe Gln Gly Leu Gly

50                      55                      60  
 Ser Pro Gly Gly Gly Ala Glu Arg Gly Gln Arg Ser Leu Asn Ser Arg  
 65                      70                      75                      80  
 Pro Pro Trp Leu His Pro Gly Asn Gly Pro Leu Leu Leu Arg His Arg  
                          85                      90                      95  
 Asp Ala Val Ala His  
                          100

<210> 3809

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3809

Met Arg Glu Phe Ser Leu Ile Glu Leu Trp Leu Met Pro Lys Val Phe  
 1                      5                      10                      15  
 Asn His Tyr Val Trp Gly Ser Phe Leu Val Gln Arg Lys Lys Lys Gln  
                          20                      25                      30  
 Pro Lys Ser Val Leu Val Tyr His Cys Thr Ser Gly Asn Leu Asn Pro  
                          35                      40                      45  
 Cys Asn Arg Gly Lys Met Gly Phe Gln Val Leu Ala Thr Phe Glu Ile  
                          50                      55                      60  
 Pro Ile Pro Phe Glu Arg Ala Leu Thr Arg Pro Tyr Ala Asp Phe Thr  
 65                      70                      75                      80  
 Thr Ser Asn Phe Arg Thr Gln Tyr Trp Asn Ala Ile Ser Gln Gln Ala  
                          85                      90                      95  
 Pro Ala Ile Ile Tyr Asp Phe Tyr Leu Trp Leu Thr Gly Arg Lys Pro  
                          100                      105                      110

Ser Tyr Arg Arg Lys Ile Pro Ser Ser Thr Gln Phe Tyr Lys Trp Arg

115

120

125

Asn Arg Ser

130

<210> 3810

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3810

Met Pro Asn Pro Asp Gly Tyr Ile Ile Cys Trp Leu Gln Val Ser Leu

1

5

10

15

Thr Ala Arg Phe Ala Ser Ala Glu Lys Ser His Gly Glu Ser Arg Thr

20

25

30

His Glu Val Leu Ser His Ile Cys Thr Ser Gly Val Val Ala Val His

35

40

45

Ser Pro Leu Asp Ala Val Ser Trp Pro Cys Phe His Pro Ile Pro Val

50

55

60

Gly Arg Val Gly Gly Trp Val Gly Glu Ala Ile Glu Cys Met Thr Gln

65

70

75

80

Thr Lys Leu Ser Trp Ala Phe Ser Pro Thr Arg Glu Ala Leu Met Ser

85

90

95

Phe Ile Glu Ala Leu Lys His Gln Ser Leu Ser Gln Ala Ser Ser Gln

100

105

110

Thr Phe Cys Asn Met Ser Ala Leu Thr Arg Phe Lys Ala Asn Val Phe

115

120

125

Pro Cys Arg Glu Glu Gly Ala Leu Arg Leu Ile Asp

130

135

140

&lt;210&gt; 3811

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3811

Met Lys Leu Lys Cys Ile Phe Gly Phe Ala Thr Lys Glu Thr Ser Cys

1

5

10

15

Tyr Asn Val Thr Asn Ile Gly Phe Lys Ser Pro Ser Asp Phe Trp Gln

20

25

30

Ser Val His Ser Thr Leu Pro Arg Glu Leu Ala Pro Cys Leu Val Phe

35

40

45

Asn Thr Ser Pro Asn Leu Ala Leu Phe Ser Ala Ala Phe Ala Phe Ile

50

55

60

Val Val Lys Asp Ser Ala Gly Asp Ser Asp Val Val Val Gln Glu Leu

65

70

75

80

Lys Ser Met Val Ala Thr Lys Ile Ala Lys Tyr Ala Val Pro Asp Glu

85

90

95

Ile Leu Val Val Lys Arg Leu Pro Lys Thr Arg Ser Gly Lys Val Met

100

105

110

Arg Arg Leu Leu Arg Lys Ile Ile Thr Ser Glu Ala Gln Glu Leu Gly

115

120

125

Asp Thr Thr Thr Leu Glu Asp Pro Ser Ile Ile Ala Glu Ile Leu Ser

130

135

140

Val Tyr Gln Lys Cys Lys Asp Lys Gln Ala Ala Ala Lys

145

150

155

&lt;210&gt; 3812

&lt;211&gt; 1591

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3812

Met Val Gln Gly Arg Val Thr Glu Val Lys Phe Pro Leu Glu His Tyr

1 5 10 15

Ile Leu Glu Leu Gln Asp His Arg Val Ala Leu Asn Gly Ser His Ser

20 25 30

Glu Lys Val Ala Ile Leu Asp Asp Lys Thr Ala Met Val Thr Ala Ser

35 40 45

Gln Leu Gly Gln Thr Asn Leu Val Phe Val His Lys Asn Val His Met

50 55 60

Arg Ser Val Ser Gly Leu Pro Asn Cys Thr Ile Tyr Val Val Glu Pro

65 70 75 80

Gly Phe Leu Gly Phe Thr Val Gln Pro Gly Asn Arg Trp Ser Leu Glu

85 90 95

Val Gly Gln Val Tyr Val Ile Thr Val Asp Val Phe Asp Lys Ser Ser

100 105 110

Thr Lys Val Tyr Ile Ser Asp Asn Leu Arg Ile Thr Tyr Asp Phe Pro

115 120 125

Lys Glu Tyr Phe Glu Glu Gln Leu Thr Thr Val Asn Gly Ser Tyr His

130 135 140

Ile Val Lys Ala Leu Lys Asp Gly Val Val Val Ile Asn Ala Ser Leu

145 150 155 160

Thr Ser Ile Ile Tyr Gln Asn Lys Asp Ile Gln Pro Ile Lys Phe Leu

165	170	175
Ile Lys His Gln Gln Glu Val Lys	Ile Tyr Phe Pro Ile Met Leu Thr	
180	185	190
Pro Lys Phe Leu Ala Phe Pro His His	Pro Met Gly Met Leu Tyr Arg	
195	200	205
Tyr Lys Val Gln Val Glu Gly Gly Ser	Gly Asn Phe Thr Trp Thr Ser	
210	215	220
Ser Asn Glu Thr Val Val Ile Val Thr	Thr Lys Gly Val Val Thr Ala	
225	230	235
Gly Gln Val Arg Gly Asn Ser Thr Val	Leu Ala Arg Asp Val Gln Asn	
245	250	255
Pro Phe Arg Tyr Gly Glu Ile Lys Ile	His Val Leu Lys Leu Asn Lys	
260	265	270
Met Glu Leu Leu Pro Phe His Ala Asp	Val Glu Ile Gly Gln Ile Ile	
275	280	285
Glu Ile Pro Ile Ala Met Tyr His Ile	Asn Lys Glu Thr Lys Glu Ala	
290	295	300
Met Ala Phe Thr Asp Cys Ser His Leu	Ser Leu Asp Leu Asn Met Asp	
305	310	315
Lys Gln Gly Val Phe Thr Leu Leu Lys	Glu Gly Ile Gln Arg Pro Gly	
325	330	335
Pro Met His Cys Ser Ser Thr His Ile	Ala Ala Lys Ser Leu Gly His	
340	345	350
Thr Leu Val Thr Val Ser Val Asn Glu	Cys Asp Lys Tyr Leu Glu Ser	
355	360	365
Ser Ala Thr Phe Ala Ala Tyr Glu Pro	Leu Lys Ala Leu Asn Pro Val	
370	375	380
Glu Val Ala Leu Val Thr Trp Gln Ser	Val Lys Glu Met Val Phe Glu	
385	390	395
		400



Gly Gly Pro Arg Pro Trp Ile Leu Glu Pro Ser Arg Phe Phe Leu Glu  
405 410 415  
Leu Asn Ala Glu Lys Thr Glu Lys Ile Gly Ile Ala Gln Val Trp Leu  
420 425 430  
Pro Ser Lys Arg Lys Gln Asn Gln Tyr Ile Tyr Arg Ile Gln Cys Leu  
435 440 445  
Asp Leu Gly Glu Gln Val Leu Thr Phe Arg Ile Gly Asn His Pro Gly  
450 455 460  
Val Leu Asn Pro Ser Pro Ala Val Glu Val Leu Gln Val Arg Phe Ile  
465 470 475 480  
Cys Ala His Pro Ala Ser Met Ser Val Thr Pro Val Tyr Lys Val Pro  
485 490 495  
Ala Gly Ala Gln Pro Cys Pro Leu Pro Gln His Asn Lys Trp Leu Ile  
500 505 510  
Pro Val Ser Arg Leu Arg Asp Thr Val Leu Glu Leu Ala Val Phe Asp  
515 520 525  
Gln His Arg Arg Lys Phe Asp Asn Phe Ser Ser Leu Met Leu Glu Trp  
530 535 540  
Lys Ser Ser Asn Glu Thr Leu Ala His Phe Glu Asp Tyr Lys Ser Val  
545 550 555 560  
Glu Met Val Ala Lys Asp Gly Gly Ser Gly Gln Thr Arg Leu His Gly  
565 570 575  
His Gln Ile Leu Lys Val His Gln Ile Lys Gly Thr Val Leu Ile Gly  
580 585 590  
Val Asn Phe Val Gly Tyr Ser Glu Lys Lys Ser Pro Lys Glu Ile Ser  
595 600 605  
Asn Leu Pro Arg Ser Val Asp Val Glu Leu Leu Leu Val Asp Asp Val  
610 615 620  
Thr Val Val Pro Glu Asn Ala Thr Ile Tyr Asn His Pro Asp Val Lys

625                      630                      635                      640  
Glu Thr Phe Ser Leu Val Glu Gly Ser Gly Tyr Phe Leu Val Asn Ser  
                                645                      650                      655  
Ser Glu Gln Gly Val Val Thr Ile Thr Tyr Met Glu Ala Glu Ser Ser  
                                660                      665                      670  
Val Glu Leu Val Pro Leu His Pro Gly Phe Phe Thr Leu Glu Val Tyr  
                                675                      680                      685  
Asp Leu Cys Leu Ala Phe Leu Gly Pro Ala Thr Ala His Leu Arg Val  
                                690                      695                      700  
Ser Asp Ile Gln Glu Leu Glu Leu Asp Leu Ile Asp Lys Val Glu Ile  
705                      710                      715                      720  
Asp Lys Thr Val Leu Val Thr Val Arg Val Leu Gly Ser Ser Lys Arg  
                                725                      730                      735  
Pro Phe Gln Asn Lys Tyr Phe Arg Asn Met Glu Leu Lys Leu Gln Leu  
                                740                      745                      750  
Ala Ser Ala Ile Val Thr Leu Thr Pro Met Glu Gln Gln Asp Glu Tyr  
                                755                      760                      765  
Ser Glu Asn Tyr Ile Leu Arg Ala Thr Thr Ile Gly Gln Thr Thr Leu  
                                770                      775                      780  
Val Ala Ile Ala Lys Asp Lys Met Gly Arg Lys Tyr Thr Ser Thr Pro  
785                      790                      795                      800  
Arg His Ile Glu Val Phe Pro Pro Phe Arg Leu Leu Pro Glu Lys Met  
                                805                      810                      815  
Thr Leu Ile Pro Met Asn Met Met Gln Val Met Ser Glu Gly Gly Pro  
                                820                      825                      830  
Gln Pro Gln Ser Ile Val His Phe Ser Ile Ser Asn Gln Thr Val Ala  
                                835                      840                      845  
Val Val Asn Arg Arg Gly Gln Val Thr Gly Lys Ile Val Gly Thr Ala  
                                850                      855                      860

Val Val His Gly Thr Ile Gln Thr Val Asn Glu Asp Thr Gly Lys Val  
865 870 875 880  
Ile Val Phe Ser Gln Asp Glu Val Gln Ile Glu Val Val Gln Leu Arg  
885 890 895  
Ala Val Arg Ile Leu Ala Ala Ala Thr Arg Leu Ile Thr Ala Thr Lys  
900 905 910  
Met Pro Val Tyr Val Met Gly Val Thr Ser Thr Gln Thr Pro Phe Ser  
915 920 925  
Phe Ser Asn Ala Asn Pro Gly Leu Thr Phe His Trp Ser Met Ser Lys  
930 935 940  
Arg Asp Val Leu Asp Leu Val Pro Arg His Ser Glu Val Phe Leu Gln  
945 950 955 960  
Leu Pro Val Glu His Asn Phe Ala Met Val Val His Thr Lys Ala Ala  
965 970 975  
Gly Arg Thr Ser Ile Lys Val Thr Val His Cys Met Asn Ser Ser Ser  
980 985 990  
Gly Gln Phe Glu Gly Asn Leu Leu Glu Leu Ser Asp Glu Val Gln Ile  
995 1000 1005  
Leu Val Phe Glu Lys Leu Gln Leu Phe Tyr Pro Glu Cys Gln Pro Glu  
1010 1015 1020  
Gln Ile Leu Met Pro Ile Asn Ser Gln Leu Lys Leu His Thr Asn Arg  
1025 1030 1035 1040  
Glu Gly Ala Ala Phe Val Ser Ser Arg Val Leu Lys Cys Phe Pro Asn  
1045 1050 1055  
Ser Ser Val Ile Glu Glu Asp Gly Glu Gly Leu Leu Lys Ala Gly Ser  
1060 1065 1070  
Ile Ala Gly Thr Ala Val Leu Glu Val Thr Ser Ile Glu Pro Phe Gly  
1075 1080 1085  
Val Asn Gln Thr Thr Ile Thr Gly Val Gln Val Ala Pro Val Thr Tyr

1090	1095	1100	
Leu Arg Val Ser Ser Gln Pro Lys Leu Tyr Thr Ala Gln Gly Arg Thr			
1105	1110	1115	1120
Leu Ser Ala Phe Pro Leu Gly Met Ser Leu Thr Phe Thr Val Gln Phe			
1125	1130	1135	
Tyr Asn Ser Ile Gly Glu Lys Phe His Thr His Asn Thr Gln Leu Tyr			
1140	1145	1150	
Leu Ala Leu Asn Arg Asp Asp Leu Leu His Ile Gly Pro Gly Asn Lys			
1155	1160	1165	
Asn Tyr Thr Tyr Met Ala Gln Ala Val Asn Arg Gly Leu Thr Leu Val			
1170	1175	1180	
Gly Leu Trp Asp Arg Arg His Pro Gly Met Ala Asp Tyr Ile Pro Val			
1185	1190	1195	1200
Ala Val Glu His Ala Ile Glu Pro Asp Thr Lys Leu Thr Phe Val Gly			
1205	1210	1215	
Asp Ile Ile Cys Phe Ser Thr His Leu Val Ser Gln His Gly Glu Pro			
1220	1225	1230	
Gly Ile Trp Met Ile Ser Ala Asn Asn Ile Leu Gln Thr Asp Ile Val			
1235	1240	1245	
Thr Gly Val Gly Val Ala Arg Ser Pro Gly Thr Ala Met Ile Phe His			
1250	1255	1260	
Asp Ile Pro Gly Val Val Lys Thr Tyr Arg Glu Val Val Val Asn Ala			
1265	1270	1275	1280
Ser Ser Arg Leu Met Leu Ser Tyr Asp Leu Lys Thr Tyr Leu Thr Asn			
1285	1290	1295	
Thr Leu Asn Ser Thr Val Phe Lys Leu Phe Ile Thr Thr Gly Arg Asn			
1300	1305	1310	
Gly Val Asn Leu Lys Gly Phe Cys Thr Pro Asn Gln Ala Leu Ala Ile			
1315	1320	1325	

Thr Lys Val Leu Leu Pro Ala Thr Leu Met Leu Cys His Val Gln Phe  
1330 1335 1340  
Ser Asn Thr Leu Leu Asp Ile Pro Ala Ser Lys Val Phe Gln Val His  
1345 1350 1355 1360  
Ser Asp Phe Ser Met Glu Lys Gly Val Tyr Val Cys Ile Ile Lys Val  
1365 1370 1375  
Arg Pro Gln Ser Glu Glu Leu Leu Gln Ala Leu Ser Val Ala Asp Thr  
1380 1385 1390  
Ser Val Tyr Gly Trp Ala Thr Leu Val Ser Glu Arg Ser Lys Asn Gly  
1395 1400 1405  
Met Gln Arg Ile Leu Ile Pro Phe Ile Pro Ala Phe Tyr Ile Asn Gln  
1410 1415 1420  
Ser Glu Leu Val Leu Ser His Lys Gln Asp Ile Gly Glu Ile Arg Val  
1425 1430 1435 1440  
Leu Gly Val Asp Arg Val Leu Arg Lys Leu Glu Val Ile Ser Ser Ser  
1445 1450 1455  
Pro Val Leu Val Val Ala Gly His Ser His Ser Pro Leu Thr Pro Gly  
1460 1465 1470  
Leu Ala Ile Tyr Ser Val Arg Val Val Asn Phe Thr Ser Phe Gln Gln  
1475 1480 1485  
Met Ala Ser Pro Val Phe Ile Asn Ile Ser Cys Val Leu Thr Ser Gln  
1490 1495 1500  
Ser Glu Ala Val Val Val Arg Ala Met Lys Asp Lys Leu Gly Ala Asp  
1505 1510 1515 1520  
His Cys Glu Asp Ser Ala Ile Leu Lys Arg Phe Thr Gly Ser Tyr Gln  
1525 1530 1535  
Ile Leu Leu Leu Thr Leu Phe Ala Val Leu Ala Ser Thr Ala Ser Ile  
1540 1545 1550  
Phe Leu Ala Tyr Ser Ala Phe Leu Asn Lys Ile Gln Thr Val Pro Val

1555	1560	1565
Val Tyr Val Pro Thr Leu Gly Thr Pro Gln Pro Gly Phe Leu Thr Pro		
1570	1575	1580
Gln Val Leu Pro Leu Thr Ser		
1585	1590	

&lt;210&gt; 3813

&lt;211&gt; 623

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3813

Met Ser Asp Leu Arg Val Gln Leu Asn Phe Ser Ala Met Ala Ser Glu		
1	5	10
Leu Glu Glu Val Lys Arg Cys Met Glu Arg Lys Asp Lys Glu Lys Ala		
20	25	30
His Leu Ala Ser Gln Val Glu Asn Leu Thr Arg Glu Leu Glu Asn Gly		
35	40	45
Glu Lys Gln Gln Leu Gln Met Leu Asp Arg Leu Lys Glu Ile Gln Asn		
50	55	60
His Phe Asp Thr Cys Glu Ala Glu Arg Lys His Ala Asp Leu Gln Ile		
65	70	75
Ser Glu Leu Thr Arg His Ala Glu Asp Ala Thr Lys Gln Ala Glu Arg		
85	90	95
Tyr Leu Ser Glu Leu Gln Gln Ser Glu Ala Leu Lys Glu Glu Ala Glu		
100	105	110
Lys Arg Arg Glu Asp Leu Lys Leu Lys Ala Gln Glu Ser Ile Arg Gln		
115	120	125

Trp Lys Leu Lys His Lys Lys Leu Glu Arg Ala Leu Glu Lys Gln Ser  
130 135 140  
Glu Thr Val Asp Glu Leu Thr Gly Lys Asn Asn Gln Ile Leu Lys Glu  
145 150 155 160  
Lys Asp Glu Leu Lys Thr Gln Leu Tyr Ala Ala Leu Gln Gln Ile Glu  
165 170 175  
Asn Leu Arg Lys Glu Leu Asn Asp Val Leu Thr Lys Arg Ala Leu Gln  
180 185 190  
Glu Glu Glu Leu His Ser Lys Glu Glu Lys Leu Arg Asp Ile Lys Ser  
195 200 205  
His Gln Ala Asp Leu Glu Leu Glu Val Lys Asn Ser Leu Asp Thr Ile  
210 215 220  
His Arg Leu Glu Ser Glu Leu Lys Lys Gln Ser Lys Ile Gln Ser Gln  
225 230 235 240  
Met Lys Val Glu Lys Ala His Leu Glu Glu Glu Ile Ala Glu Leu Lys  
245 250 255  
Lys Ser Gln Ala Gln Asp Lys Ala Lys Leu Leu Glu Met Gln Glu Ser  
260 265 270  
Ile Lys Asp Leu Ser Ala Ile Arg Ala Asp Leu Ala Asn Lys Leu Ala  
275 280 285  
Glu Glu Glu Arg Ala Lys Lys Ala Val Leu Lys Asp Leu Ser Asp Leu  
290 295 300  
Thr Ala Gln Ala Lys Ser Arg Asp Glu Glu Thr Ala Thr Ile Ile Thr  
305 310 315 320  
Gln Leu Lys Leu Glu Arg Asp Val His Gln Arg Glu Leu Lys Asp Leu  
325 330 335  
Thr Ser Ser Leu Gln Ser Val Lys Thr Lys His Glu Gln Asn Ile Gln  
340 345 350  
Glu Leu Met Lys His Phe Lys Lys Glu Lys Ser Glu Ala Glu Asn His

355 360 365  
Ile Arg Thr Leu Lys Ala Glu Ser Leu Glu Glu Lys Asn Met Ala Lys  
370 375 380  
Ile His Arg Gly Gln Leu Glu Lys Leu Lys Ser Gln Cys Asp Arg Leu  
385 390 395 400  
Thr Glu Glu Leu Thr Gln Asn Glu Asn Glu Asn Lys Lys Leu Lys Leu  
405 410 415  
Lys Tyr Gln Cys Leu Lys Asp Gln Leu Glu Glu Arg Glu Lys His Ile  
420 425 430  
Ser Ile Glu Glu Glu His Leu Arg Arg Met Glu Glu Ala Arg Leu Gln  
435 440 445  
Leu Lys Asp Gln Leu Leu Cys Leu Glu Thr Glu Gln Glu Ser Ile Leu  
450 455 460  
Gly Val Ile Gly Lys Glu Ile Asp Ala Ala Cys Lys Thr Phe Ser Lys  
465 470 475 480  
Asp Ser Val Glu Lys Leu Lys Val Phe Ser Ser Gly Pro Asp Ile His  
485 490 495  
Tyr Asp Pro His Arg Trp Leu Ala Glu Ser Lys Thr Lys Leu Gln Trp  
500 505 510  
Leu Cys Glu Glu Leu Lys Glu Arg Glu Asn Arg Glu Lys Asn Leu Arg  
515 520 525  
His Gln Leu Met Leu Cys Arg Gln Gln Leu Arg Asn Leu Thr Glu Asn  
530 535 540  
Lys Glu Ser Glu Leu Gln Cys Leu Phe Gln Gln Ile Glu Arg Gln Glu  
545 550 555 560  
Gln Leu Leu Asp Glu Ile His Arg Glu Lys Arg Asp Leu Leu Glu Glu  
565 570 575  
Thr Gln Arg Lys Asp Glu Glu Met Gly Ser Leu Gln Asp Arg Val Ile  
580 585 590



Ala Leu Glu Thr Ser Thr Gln Val Ala Leu Asp His Leu Glu Ser Val

595

600

605

Pro Glu Lys Leu Ser Leu Leu Glu Asp Phe Lys Asp Phe Arg Arg

610

615

620

<210> 3814

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3814

Met Asp Ala Glu Leu Leu Gly Arg Glu Leu Arg Leu Phe Leu Phe Ser

1

5

10

15

Pro Gln Glu Lys Asn Ser Phe Ser Asp Val Phe Val Val Gly Glu Tyr

20

25

30

Phe Cys His Cys Phe Glu Lys Thr Ser Pro Pro Asn Ser Pro Ser Phe

35

40

45

Leu Gly Ile Ser Phe Leu Lys Trp Lys Ala Phe Asn Ile His Ser Lys

50

55

60

Leu Ala Leu Leu Leu Pro Gln Gly Lys Ile Thr Ser Lys Gln Arg Cys

65

70

75

80

Leu Pro Ser Val Ser Gly Gly Ala Ser Leu Arg Gly Gly Leu Cys Asp

85

90

95

Pro Leu Pro Gly Gly Gly Asp Gly Gly His Leu Phe Ile Asn Asp Val

100

105

110

Arg Leu Lys Val Thr Glu Pro Phe Leu His Met Pro Leu Cys Arg Glu

115

120

125

Leu Cys Ile Asn Thr Leu Leu Gly Arg Thr Glu Gln Asp Trp Glu Leu

130 135 140  
Arg Ala Asn Pro Phe Leu Arg Ala Ser Asn Ser  
145 150 155

<210> 3815

<211> 577

<212> PRT

<213> Homo sapiens

<400> 3815

Met Arg Trp Gly Met Pro Pro Gln Asp Ala Phe Thr Thr Gln Trp Leu  
1 5 10 15  
Val Arg Asp Leu Arg Gly Lys Thr Glu Lys Glu Phe Lys Ala Tyr Val  
20 25 30  
Ser Leu Phe Met Arg His Leu Cys Glu Pro Gly Ala Asp Gly Ser Glu  
35 40 45  
Thr Phe Ala Asp Gly Val Pro Arg Glu Gly Leu Ser Arg Gln Gln Val  
50 55 60  
Leu Thr Arg Ile Gly Val Met Ser Leu Val Lys Lys Lys Val Gln Glu  
65 70 75 80  
Phe Glu His Ile Asn Gly Arg Trp Ser Met Pro Glu Leu Met Pro Asp  
85 90 95  
Pro Ser Ala Asp Ser Lys Arg Ser Ser Arg Ala Ser Ser Pro Thr Lys  
100 105 110  
Thr Ser Pro Thr Thr Pro Glu Ala Ser Ala Thr Asn Ser Pro Cys Thr  
115 120 125  
Ser Lys Pro Ala Thr Pro Ala Pro Ser Glu Lys Gly Glu Gly Ile Arg  
130 135 140

Thr Pro Leu Glu Lys Glu Glu Ala Glu Asn Gln Glu Glu Lys Pro Glu  
145 150 155 160  
Lys Asn Ser Arg Ile Gly Glu Lys Met Glu Thr Glu Ala Asp Ala Pro  
165 170 175  
Ser Pro Ala Pro Ser Leu Gly Glu Arg Leu Glu Pro Arg Lys Ile Pro  
180 185 190  
Leu Glu Asp Glu Val Pro Gly Val Pro Gly Glu Met Glu Pro Glu Pro  
195 200 205  
Gly Tyr Arg Gly Asp Arg Glu Lys Ser Ala Thr Glu Ser Thr Pro Gly  
210 215 220  
Glu Arg Gly Glu Glu Lys Pro Leu Asp Gly Gln Glu His Arg Glu Arg  
225 230 235 240  
Pro Glu Gly Glu Thr Gly Asp Leu Gly Lys Arg Ala Glu Asp Val Lys  
245 250 255  
Gly Asp Arg Glu Leu Arg Pro Gly Pro Arg Asp Glu Pro Arg Ser Asn  
260 265 270  
Gly Arg Arg Glu Glu Lys Thr Glu Lys Pro Arg Phe Met Phe Asn Ile  
275 280 285  
Ala Asp Gly Gly Phe Thr Glu Leu His Thr Leu Trp Gln Asn Glu Glu  
290 295 300  
Arg Ala Ala Ile Ser Ser Gly Lys Leu Asn Glu Ile Trp His Arg Arg  
305 310 315 320  
His Asp Tyr Trp Leu Leu Ala Gly Ile Val Leu His Gly Tyr Ala Arg  
325 330 335  
Trp Gln Asp Ile Gln Asn Asp Ala Gln Phe Ala Ile Ile Asn Glu Pro  
340 345 350  
Phe Lys Thr Glu Ala Asn Lys Gly Asn Phe Leu Glu Met Lys Asn Lys  
355 360 365  
Phe Leu Ala Arg Arg Phe Lys Leu Leu Glu Gln Ala Leu Val Ile Glu

370 375 380  
Glu Gln Leu Arg Arg Ala Ala Tyr Leu Asn Leu Ser Gln Glu Pro Ala  
385 390 395 400  
His Pro Ala Met Ala Leu His Ala Arg Phe Ala Glu Ala Glu Cys Leu  
405 410 415  
Ala Glu Ser His Gln His Leu Ser Lys Glu Ser Leu Ala Gly Asn Lys  
420 425 430  
Pro Ala Asn Ala Val Leu His Lys Val Leu Asn Gln Leu Glu Glu Leu  
435 440 445  
Leu Ser Asp Met Lys Ala Asp Val Thr Arg Leu Pro Ala Thr Leu Ser  
450 455 460  
Arg Ile Pro Pro Ile Ala Ala Arg Leu Gln Met Ser Glu Arg Ser Ile  
465 470 475 480  
Leu Ser Arg Leu Ala Ser Lys Gly Thr Glu Pro His Pro Thr Pro Ala  
485 490 495  
Tyr Pro Pro Gly Pro Tyr Ala Thr Pro Pro Gly Tyr Gly Ala Ala Phe  
500 505 510  
Ser Ala Ala Pro Val Gly Ala Leu Ala Ala Ala Gly Ala Asn Tyr Ser  
515 520 525  
Gln Met Pro Ala Gly Ser Phe Ile Thr Ala Ala Thr Asn Gly Pro Pro  
530 535 540  
Val Leu Val Lys Lys Glu Lys Glu Met Val Gly Ala Leu Val Ser Asp  
545 550 555 560  
Gly Leu Asp Arg Lys Glu Pro Arg Ala Gly Glu Val Ile Cys Ile Asp  
565 570 575  
Asp

&lt;210&gt; 3816

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3816

Met Thr Ser Ala Lys Thr Leu Arg Gly Arg His Ser Ser Thr Lys Thr  
1 5 10 15  
Leu Phe Pro Ser Glu Val Pro Phe Thr Gly Thr Gly Val Arg Thr Ser  
20 25 30  
Pro Cys Leu Leu Gly Ala Ile Pro Phe Asn Leu Gln Gln Pro Leu Val  
35 40 45  
Ser Val His Asn Ala Asn Glu Val Arg Val Ala Ser Pro Gln Ala Asn  
50 55 60  
Asn Phe Pro Gln Ile Ala Ala Arg Cys Gly Pro Ala Lys Ser Gln Gly  
65 70 75 80  
Ala Ala Ile Ser Lys Gln Ser Pro Pro Val Leu Glu Gly Val Cys Arg  
85 90 95  
Asp Ala Ser Gly Glu Arg Pro Gly Pro Gly Ala Gly Leu Gln Leu Trp  
100 105 110  
Asp Lys Leu Leu Ser Gly Pro Gly Ala Thr Gln Arg Arg Gln Ala Ala  
115 120 125  
Val Gln Val Lys Pro Ile Gln His Leu Ala Pro Cys Leu Gln Ala  
130 135 140

&lt;210&gt; 3817

&lt;211&gt; 123

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3817

Met Lys Tyr Phe Ala Pro Ser Arg Gly Pro Gln Leu Ser Leu Gln Val  
1 5 10 15  
Leu Leu Trp Arg Leu Asn Leu Pro Pro Val Ser Arg Ser Ser Gln Leu  
20 25 30  
Ser Leu Leu Ser Phe Leu Gly Arg Trp Asn Phe Leu Arg Pro Arg Arg  
35 40 45  
Pro Pro Thr Leu Pro Pro Glu Ser Ser Ile Glu Ser Val Ala Gln Thr  
50 55 60  
Pro Leu Asn His Glu Val Thr Val Gln Thr Gln Gly Glu Asp Gln Ala  
65 70 75 80  
His Tyr Thr Leu Pro Ser Ile Thr Val Lys Pro Ala Asp Val Glu Ile  
85 90 95  
Ser Ile Thr Ser Glu Pro Thr Thr Asp Thr Asp Ser Ser Pro Ala Gln  
100 105 110  
Gln Ala Ala Pro Asn Gln His Pro Glu Gln Val  
115 120

<210> 3818

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3818

Met Ala Gly Gly Arg Pro Ala Asn Lys Ala Pro Gly Thr Gly Leu Gly  
1 5 10 15

Gly Thr Pro Gly Val Pro Ser Trp Val Gly Trp Thr Gly Pro Trp Phe  
                     20                    25                    30  
 Ala Gly Ser Cys Ala Ala Met Arg Leu Leu Ala Gly Gly Ile Arg Gln  
                     35                    40                    45  
 Pro Pro Ala Ser Leu Ala Gln Val Leu Asp Ser Ile Lys Gly Gln Ser  
                     50                    55                    60  
 Val Phe Phe Met Leu Thr Ser Met Arg Lys Pro Asn Ala Ser Phe Ser  
                     65                    70                    75                    80  
 Glu Ser Ala Gln Ile Tyr Ser Ala Glu Tyr Arg Phe Val Gln Thr Thr  
                                     85                    90                    95  
 Ala Ala Leu Gln Phe Ile Val Thr Ser Lys Gly Lys Gly Gln Lys Asn  
                     100                    105                    110  
 Ile

<210> 3819

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3819

Met Trp His Val Thr Ala Tyr Phe Ser Leu Leu Leu Arg Ala Pro Ser  
                     1                    5                    10                    15  
 Glu Gly Ile Gln Ile Pro Val Ile His Thr Ile Glu Val Lys Ser Phe  
                     20                    25                    30  
 Gln Ile Arg Lys Ala Gln Phe Phe Leu Gln Arg Cys Leu Phe Ile Phe  
                     35                    40                    45  
 Ile Val Ser Ile Ser Phe Lys Asn Leu His Glu Glu Ser Ile Cys Phe

50                      55                      60  
 Cys Leu Lys Glu Asn Ser Pro Gly Phe Glu Leu Asn Ser Ala Leu Ala  
 65                      70                      75                      80  
 Arg Leu Tyr Pro Phe Pro Lys Glu Lys Ser Lys Val Ser Thr Tyr Ser  
                          85                      90                      95  
 Lys Arg Met Ser Pro Gly Phe Ser Ile Leu Glu Ser Leu Ile Ser Pro  
                          100                      105                      110  
 Thr Ile Leu Glu Arg Ser Lys  
                          115

<210> 3820

<211> 358

<212> PRT

<213> Homo sapiens

<400> 3820

Met Asn Thr Ala Asn Ser Leu Cys Leu Gly Gly Thr Pro Ala Ser Ala  
 1                      5                      10                      15  
 Ser Ser Ser Ser Ser Arg Ala Ala Pro Leu Val Thr Ser Gly Lys Ala  
                          20                      25                      30  
 Pro Pro Asn Leu Pro Gln Gly Val Pro Pro Leu Leu His Asn Gln Tyr  
                          35                      40                      45  
 Leu Val Gly Pro Gly Gly Leu Leu Pro Ala Tyr Pro Ile Tyr Gly Tyr  
                          50                      55                      60  
 Asp Glu Leu Gln Met Leu Gln Ser Arg Leu Pro Val Asp Tyr Tyr Gly  
 65                      70                      75                      80  
 Ile Pro Phe Ala Ala Pro Thr Ala Leu Ala Ser Arg Asp Gly Ser Leu  
                          85                      90                      95



Ala Asn Asn Pro Tyr Pro Gly Asp Val Thr Lys Phe Gly Arg Gly Asp  
100 105 110  
Ser Ala Ser Pro Ala Pro Ala Thr Thr Pro Ala Gln Pro Gln Gln Ser  
115 120 125  
Gln Ser Gln Thr His His Thr Ala Gln Gln Pro Phe Val Asn Pro Ala  
130 135 140  
Leu Pro Pro Gly Tyr Ser Tyr Thr Gly Leu Pro Tyr Tyr Thr Gly Met  
145 150 155 160  
Pro Ser Ala Phe Gln Tyr Gly Pro Thr Met Phe Val Pro Pro Ala Ser  
165 170 175  
Ala Lys Gln His Gly Val Asn Leu Ser Thr Pro Thr Pro Pro Phe Gln  
180 185 190  
Gln Ala Ser Gly Tyr Gly Gln His Gly Tyr Ser Thr Gly Tyr Asp Asp  
195 200 205  
Leu Thr Gln Gly Thr Ala Ala Gly Asp Tyr Ser Lys Gly Gly Tyr Ala  
210 215 220  
Gly Ser Ser Gln Ala Pro Asn Lys Ser Ala Gly Ser Gly Pro Gly Lys  
225 230 235 240  
Gly Val Ser Val Ser Ser Ser Thr Thr Gly Leu Pro Asp Met Thr Gly  
245 250 255  
Ser Val Tyr Asn Lys Thr Gln Thr Phe Asp Lys Gln Gly Phe His Ala  
260 265 270  
Gly Thr Pro Pro Pro Phe Ser Leu Pro Ser Val Leu Gly Ser Thr Gly  
275 280 285  
Pro Leu Ala Ser Gly Ala Ala Pro Gly Tyr Ala Pro Pro Pro Phe Leu  
290 295 300  
His Ile Leu Pro Ala His Gln Gln Pro His Ser Gln Leu Leu His His  
305 310 315 320  
His Leu Pro Gln Asp Ala Gln Ser Gly Ser Gly Gln Arg Ser Gln Pro

325                      330                      335  
 Ser Ser Leu Gln Pro Lys Ser Gln Ala Ser Lys Pro Ala Tyr Gly Asn  
 340                      345                      350  
 Ser Pro Tyr Trp Thr Asn  
 355

<210> 3821

<211> 1255

<212> PRT

<213> Homo sapiens

<400> 3821

Met Gly Pro Lys His Val Leu Arg Gln Pro Gly Pro Ser Glu Arg His  
 1                      5                      10                      15  
 His Pro Glu Val Pro Ala Trp Thr Pro Arg Ala Gly Pro Pro Cys Trp  
 20                      25                      30  
 Leu Cys Arg Gln Arg Trp Gly Trp Thr Leu His Pro Pro Gly Arg Gly  
 35                      40                      45  
 Cys Pro Ala Leu Leu Leu Ser Glu Pro Arg Met Ala Ala Gln Val Thr  
 50                      55                      60  
 Leu Glu Asp Ala Leu Ser Asn Val Asp Leu Leu Glu Glu Leu Pro Leu  
 65                      70                      75                      80  
 Pro Asp Gln Gln Pro Cys Ile Glu Pro Pro Pro Ser Ser Leu Leu Tyr  
 85                      90                      95  
 Gln Asn Glu Met Leu Glu Glu Gly Gln Glu Tyr Ala Val Met Leu Tyr  
 100                      105                      110  
 Thr Trp Arg Ser Cys Ser Arg Ala Ile Pro Gln Val Arg Cys Asn Glu  
 115                      120                      125

Gln Pro Asn Arg Val Glu Ile Tyr Glu Lys Thr Val Glu Val Leu Glu  
130 135 140  
Pro Glu Val Thr Lys Leu Met Asn Phe Met Tyr Phe Gln Arg Asn Ala  
145 150 155 160  
Ile Glu Arg Phe Cys Gly Glu Val Arg Arg Leu Cys His Ala Glu Arg  
165 170 175  
Arg Lys Asp Phe Val Ser Glu Ala Tyr Leu Ile Thr Leu Gly Lys Phe  
180 185 190  
Ile Asn Met Phe Ala Val Leu Asp Glu Leu Lys Asn Met Lys Cys Ser  
195 200 205  
Val Lys Asn Asp His Ser Ala Tyr Lys Arg Ala Ala Gln Phe Leu Arg  
210 215 220  
Lys Met Ala Asp Pro Gln Ser Ile Gln Glu Ser Gln Asn Leu Ser Met  
225 230 235 240  
Phe Leu Ala Asn His Asn Lys Ile Thr Gln Ser Leu Gln Gln Gln Leu  
245 250 255  
Glu Val Ile Ser Gly Tyr Glu Glu Leu Leu Ala Asp Ile Val Asn Leu  
260 265 270  
Cys Val Asp Tyr Tyr Glu Asn Arg Met Tyr Leu Thr Pro Ser Glu Lys  
275 280 285  
His Met Leu Leu Lys Val Met Gly Phe Gly Leu Tyr Leu Met Asp Gly  
290 295 300  
Ser Val Ser Asn Ile Tyr Lys Leu Asp Ala Lys Lys Arg Ile Asn Leu  
305 310 315 320  
Ser Lys Ile Asp Lys Tyr Phe Lys Gln Leu Gln Val Val Pro Leu Phe  
325 330 335  
Gly Asp Met Gln Ile Glu Leu Ala Arg Tyr Ile Lys Thr Ser Ala His  
340 345 350  
Tyr Glu Glu Asn Lys Ser Arg Trp Thr Cys Thr Ser Ser Gly Ser Ser

355 360 365  
Pro Gln Tyr Asn Ile Cys Glu Gln Met Ile Gln Ile Arg Glu Asp His  
370 375 380  
Met Arg Phe Ile Ser Glu Leu Ala Arg Tyr Ser Asn Ser Glu Val Val  
385 390 395 400  
Thr Gly Ser Gly Arg Gln Glu Ala Gln Lys Thr Asp Ala Glu Tyr Arg  
405 410 415  
Lys Leu Phe Asp Leu Ala Leu Gln Gly Leu Gln Leu Leu Ser Gln Trp  
420 425 430  
Ser Ala His Val Met Glu Val Tyr Ser Trp Lys Leu Val His Pro Thr  
435 440 445  
Asp Lys Tyr Ser Asn Lys Asp Cys Pro Asp Ser Ala Glu Glu Tyr Glu  
450 455 460  
Arg Ala Thr Arg Tyr Asn Tyr Thr Ser Glu Glu Lys Phe Ala Leu Val  
465 470 475 480  
Glu Val Ile Ala Met Ile Lys Gly Leu Gln Val Leu Met Gly Arg Met  
485 490 495  
Glu Ser Val Phe Asn His Ala Ile Arg His Thr Val Tyr Ala Ala Leu  
500 505 510  
Gln Asp Phe Ser Gln Val Thr Leu Arg Glu Pro Leu Arg Gln Ala Ile  
515 520 525  
Lys Lys Lys Lys Asn Val Ile Gln Ser Val Leu Gln Ala Ile Arg Lys  
530 535 540  
Thr Val Cys Asp Trp Glu Thr Gly His Glu Pro Phe Asn Asp Pro Ala  
545 550 555 560  
Leu Arg Gly Glu Lys Asp Pro Lys Ser Gly Phe Asp Ile Lys Val Pro  
565 570 575  
Arg Arg Ala Val Gly Pro Ser Ser Thr Gln Leu Tyr Met Val Arg Thr  
580 585 590

Met Leu Glu Ser Leu Ile Ala Asp Lys Ser Gly Ser Lys Lys Thr Leu  
 595 600 605  
 Arg Ser Ser Leu Glu Gly Pro Thr Ile Leu Asp Ile Glu Lys Phe His  
 610 615 620  
 Arg Glu Ser Phe Phe Tyr Thr His Leu Ile Asn Phe Ser Glu Thr Leu  
 625 630 635 640  
 Gln Gln Cys Cys Asp Leu Ser Gln Leu Trp Phe Arg Glu Phe Phe Leu  
 645 650 655  
 Glu Leu Thr Met Gly Arg Arg Ile Gln Phe Pro Ile Glu Met Ser Met  
 660 665 670  
 Pro Trp Ile Leu Thr Asp His Ile Leu Glu Thr Lys Glu Ala Ser Met  
 675 680 685  
 Met Glu Tyr Val Leu Tyr Ser Leu Asp Leu Tyr Asn Asp Ser Ala His  
 690 695 700  
 Tyr Ala Leu Thr Arg Phe Asn Lys Gln Phe Leu Tyr Asp Glu Ile Glu  
 705 710 715 720  
 Ala Glu Val Asn Leu Cys Phe Asp Gln Phe Val Tyr Lys Leu Ala Asp  
 725 730 735  
 Gln Ile Phe Ala Tyr Tyr Lys Val Met Ala Gly Ser Leu Leu Leu Asp  
 740 745 750  
 Lys Arg Leu Arg Ser Glu Cys Lys Asn Gln Gly Ala Thr Ile His Leu  
 755 760 765  
 Pro Pro Ser Asn Arg Tyr Glu Thr Leu Leu Lys Gln Arg His Val Gln  
 770 775 780  
 Leu Leu Gly Arg Ser Ile Asp Leu Asn Arg Leu Ile Thr Gln Arg Val  
 785 790 795 800  
 Ser Ala Ala Met Tyr Lys Ser Leu Glu Leu Ala Ile Gly Arg Phe Glu  
 805 810 815  
 Ser Glu Asp Leu Thr Ser Ile Val Glu Leu Asp Gly Leu Leu Glu Ile

820	825	830	
Asn Arg Met Thr His Lys Leu Leu Ser Arg Tyr Leu Thr Leu Asp Gly			
835	840	845	
Phe Asp Ala Met Phe Arg Glu Ala Asn His Asn Val Ser Ala Pro Tyr			
850	855	860	
Gly Arg Ile Thr Leu His Val Phe Trp Glu Leu Asn Tyr Asp Phe Leu			
865	870	875	880
Pro Asn Tyr Cys Tyr Asn Gly Ser Thr Asn Arg Phe Val Arg Thr Val			
885	890	895	
Leu Pro Phe Ser Gln Glu Phe Gln Arg Asp Lys Gln Pro Asn Ala Gln			
900	905	910	
Pro Gln Tyr Leu His Gly Ser Lys Ala Leu Asn Leu Ala Tyr Ser Ser			
915	920	925	
Ile Tyr Gly Ser Tyr Arg Asn Phe Val Gly Pro Pro His Phe Gln Val			
930	935	940	
Ile Cys Arg Leu Leu Gly Tyr Gln Gly Ile Ala Val Val Met Glu Glu			
945	950	955	960
Leu Leu Lys Val Val Lys Ser Leu Leu Gln Gly Thr Ile Leu Gln Tyr			
965	970	975	
Val Lys Thr Leu Met Glu Val Met Pro Lys Ile Cys Arg Leu Pro Arg			
980	985	990	
His Glu Tyr Gly Ser Pro Gly Ile Leu Glu Phe Phe His His Gln Leu			
995	1000	1005	
Lys Asp Ile Val Glu Tyr Ala Glu Leu Lys Thr Val Arg Phe Gln Asn			
1010	1015	1020	
Leu His Ala Ala Pro Phe Gln Asn Ile Leu Pro Arg Val His Val Lys			
1025	1030	1035	1040
Glu Gly Glu Arg Leu Asp Ala Lys Met Lys Arg Leu Glu Ser Lys Tyr			
1045	1050	1055	

Ala Pro Leu His Leu Val Pro Leu Ile Glu Arg Leu Gly Thr Pro Gln  
1060 1065 1070

Gln Ile Ala Ile Ala Arg Glu Gly Asp Leu Leu Thr Lys Glu Arg Leu  
1075 1080 1085

Cys Cys Gly Leu Ser Met Phe Glu Val Ile Leu Thr Arg Ile Arg Ser  
1090 1095 1100

Phe Leu Asp Asp Pro Ile Trp Arg Gly Pro Leu Pro Ser Asn Gly Val  
1105 1110 1115 1120

Met His Val Asp Glu Cys Val Glu Phe His Arg Leu Trp Ser Ala Met  
1125 1130 1135

Gln Phe Val Tyr Cys Ile Pro Val Gly Thr His Glu Phe Thr Val Glu  
1140 1145 1150

Gln Cys Phe Gly Asp Gly Leu His Trp Ala Gly Cys Met Ile Ile Val  
1155 1160 1165

Leu Leu Gly Gln Gln Arg Arg Phe Ala Val Leu Asp Phe Cys Tyr His  
1170 1175 1180

Leu Leu Lys Val Gln Lys His Asp Gly Lys Asp Glu Ile Ile Lys Asn  
1185 1190 1195 1200

Val Pro Leu Lys Lys Met Val Glu Arg Ile Arg Lys Phe Gln Ile Leu  
1205 1210 1215

Asn Asp Glu Ile Ile Thr Ile Leu Asp Lys Tyr Leu Lys Ser Gly Asp  
1220 1225 1230

Gly Glu Gly Thr Pro Val Glu His Val Arg Cys Phe Gln Pro Pro Ile  
1235 1240 1245

His Gln Ser Leu Ala Ser Ser  
1250 1255

&lt;210&gt; 3822

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3822

Met Gly Pro Leu Trp Tyr Thr Gln Ser Ile Thr Asp Arg Asn Met Thr

1 5 10 15

Glu Met Phe Pro Lys His Thr Gly Cys Ser Val Gly Ser Ala Ala Ala

20 25 30

Pro Ala Thr Leu Glu Thr Leu Val Ala Leu Gly Thr Thr Arg Ser His

35 40 45

Ala Arg Pro Pro Leu Cys Gln Glu Ser Gln His Thr Glu Glu Leu Ala

50 55 60

Ile Arg His Gln His Gln Ala Pro Ala Leu His Val Gly Leu Ser Asp

65 70 75 80

Pro Asp Val Thr Glu Asn Pro Ser Asp Pro Ala Ser Gly Ala Ala Cys

85 90 95

Thr Cys Phe Leu His Asn Ser Pro Gln Ala Ala Leu Pro Gly Ala Gly

100 105 110

Lys His Cys Pro Ser Gly Val Ala Asn Ser Arg Leu Cys Leu Ser Gln

115 120 125

Asn His Tyr Ser Asp His Pro Asp Ala Asn Pro Arg Tyr Ile Ile His

130 135 140

Leu Ser Asp Pro Phe Cys Leu His Leu Trp Ser Thr Ala His Gln Val

145 150 155 160

Glu Ser Ser Glu Met Thr

165



&lt;210&gt; 3823

&lt;211&gt; 679

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3823

Met Leu Ser Met Glu Asn Val Gly Asn Tyr Gln Gly Tyr Ser Gln Glu

1 5 10 15

Thr Ala Pro Lys Asp His Leu Leu His Asp Pro Glu Thr Ser Ser Asp

20 25 30

Glu Asp Leu Arg Ser Asn Ser Glu Arg Asp Leu Glu Thr His Met Met

35 40 45

His Leu Ser Gly Asn Asp Ser Gly Val Arg Leu Gly Gln Lys Gln Leu

50 55 60

Glu Asn Ala Leu Thr Val Arg Leu Ser Lys Lys Phe Glu Lys Ile Asn

65 70 75 80

Glu Gly Arg Met Pro Gly Thr Val His Ser Ser Trp His Ser Val Lys

85 90 95

Gln Thr Met Ser Leu Pro Glu Lys Ser Gln Ser Gln Ile Lys His Gln

100 105 110

Asn Leu Val Ala Leu Val Ser Glu Asp His Cys Val Asp Thr Ser Gln

115 120 125

Glu Ile Ser Phe Leu Gly Ser Asn Lys Gln Lys Met Leu Glu Ala His

130 135 140

Ile Lys Thr Phe Arg Met Arg Met Leu Trp Gly Leu Pro Cys Lys Val

145 150 155 160

Leu Glu Ser Ile Glu Ile Phe Lys Ser Glu Glu Asp Ile Ser Asn Ser

165 170 175

Phe Ser His Phe Tyr Leu Pro Ser Ser Ala Ser Phe Ile Ser Gln Gly